

Multi-Stage Growth Discounted Cash Flow Model  
 30 Day Average Stock Price  
 Average EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]						
Company	Ticker	Stock Price	EPS Growth Rate Estimates				Long-Term Growth	Payout Ratio			Iterative Solution		Terminal P/E Ratio	Terminal PEG Ratio						
			Zacks	First Call	Line	Average		2019	2022	2029	Proof	IRR								
ALLETE, Inc.	ALE	\$75.79	NA	6.00%	3.50%	4.75%	5.32%	66.00%	66.00%	65.57%	\$0.00	8.33%	22.91	4.31						
Black Hills Corporation	BKH	\$66.05	4.70%	4.46%	6.50%	5.22%	5.32%	59.00%	57.00%	65.57%	\$0.00	9.09%	18.28	3.44						
El Paso Electric Company	EE	\$51.25	4.40%	5.10%	3.00%	4.17%	5.32%	61.00%	65.00%	65.57%	\$0.00	8.60%	21.04	3.96						
Hawaiian Electric Industries, Inc.	HE	\$36.89	6.40%	7.80%	3.50%	5.90%	5.32%	61.00%	62.00%	65.57%	\$0.00	8.83%	19.86	3.70						
Northwestern Corporation	NWE	\$62.50	2.80%	2.59%	2.50%	2.56%	5.32%	65.00%	68.00%	65.57%	\$0.00	8.65%	20.74	3.90						
OGE Energy Corp.	OGE	\$40.48	5.20%	NA	6.00%	5.60%	5.32%	71.00%	71.00%	65.57%	\$0.00	9.07%	18.38	3.46						
PNM Resources, Inc.	PNM	\$41.99	4.70%	4.10%	7.50%	5.43%	5.32%	50.00%	50.00%	65.57%	\$0.00	8.67%	20.59	3.87						
Pinnacle West Capital Corporation	PNW	\$86.95	4.60%	4.16%	6.00%	4.92%	5.32%	62.00%	62.00%	65.57%	\$0.00	9.05%	18.51	3.48	Including Flotation Costs					
											Mean	8.79%	20.02							
											Max	9.09%								
											Min	8.33%								
													8.92%							
													9.23%							
													8.46%							
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]		
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
ALLETE, Inc.	ALE	\$3.13	\$3.28	\$3.43	\$3.60	\$3.77	\$3.95	\$4.13	\$4.34	\$4.55	\$4.78	\$5.02	\$5.29	\$5.57	\$5.86	\$6.17	\$6.50	\$6.85		
Black Hills Corporation	BKH	\$3.38	\$3.56	\$3.74	\$3.94	\$4.14	\$4.36	\$4.59	\$4.83	\$5.08	\$5.35	\$5.63	\$5.93	\$6.24	\$6.58	\$6.93	\$7.29	\$7.68		
El Paso Electric Company	EE	\$2.42	\$2.52	\$2.63	\$2.74	\$2.85	\$2.97	\$3.09	\$3.23	\$3.37	\$3.53	\$3.71	\$3.90	\$4.10	\$4.32	\$4.55	\$4.80	\$5.05		
Hawaiian Electric Industries, Inc.	HE	\$1.64	\$1.74	\$1.84	\$1.95	\$2.06	\$2.18	\$2.31	\$2.45	\$2.59	\$2.73	\$2.88	\$3.04	\$3.20	\$3.37	\$3.55	\$3.74	\$3.94		
Northwestern Corporation	NWE	\$3.34	\$3.43	\$3.51	\$3.60	\$3.70	\$3.79	\$3.89	\$4.01	\$4.14	\$4.31	\$4.50	\$4.72	\$4.97	\$5.23	\$5.51	\$5.80	\$6.11		
OGE Energy Corp.	OGE	\$1.92	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.13	\$3.30	\$3.47	\$3.66	\$3.85	\$4.06	\$4.27	\$4.50		
PNM Resources, Inc.	PNM	\$1.92	\$2.02	\$2.13	\$2.25	\$2.37	\$2.50	\$2.64	\$2.78	\$2.93	\$3.09	\$3.25	\$3.43	\$3.61	\$3.80	\$4.00	\$4.22	\$4.44		
Pinnacle West Capital Corporation	PNW	\$4.43	\$4.65	\$4.88	\$5.12	\$5.37	\$5.63	\$5.91	\$6.20	\$6.52	\$6.85	\$7.21	\$7.59	\$7.99	\$8.41	\$8.86	\$9.33	\$9.83		
Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]				
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033				
ALLETE, Inc.	ALE	66.00%	66.00%	66.00%	66.00%	65.94%	65.88%	65.82%	65.75%	65.69%	65.63%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%		
Black Hills Corporation	BKH	59.00%	58.33%	57.67%	57.00%	58.22%	59.45%	60.67%	61.90%	63.12%	64.35%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%		
El Paso Electric Company	EE	61.00%	62.33%	63.67%	65.00%	65.08%	65.16%	65.24%	65.33%	65.41%	65.49%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%		
Hawaiian Electric Industries, Inc.	HE	61.00%	61.33%	61.67%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%		
Northwestern Corporation	NWE	65.00%	66.00%	67.00%	68.00%	67.65%	67.31%	66.96%	66.61%	66.26%	65.92%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%		
OGE Energy Corp.	OGE	71.00%	71.00%	71.00%	71.00%	70.22%	69.45%	68.67%	67.90%	67.12%	66.35%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%		
PNM Resources, Inc.	PNM	50.00%	50.00%	50.00%	50.00%	52.22%	54.45%	56.67%	58.90%	61.12%	63.35%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%		
Pinnacle West Capital Corporation	PNW	62.00%	62.00%	62.00%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%		
Projected Annual Cash Flows		[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	Terminal Value		
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal Value			
ALLETE, Inc.	ALE	\$2.27	\$2.37	\$2.49	\$2.61	\$2.73	\$2.86	\$2.99	\$3.14	\$3.30	\$3.47	\$3.65	\$3.84	\$4.05	\$4.26	\$4.49	\$156.93			
Black Hills Corporation	BKH	\$2.21	\$2.30	\$2.39	\$2.48	\$2.67	\$2.87	\$3.08	\$3.31	\$3.55	\$3.82	\$4.09	\$4.31	\$4.54	\$4.78	\$5.04	\$140.48			
El Paso Electric Company	EE	\$1.60	\$1.70	\$1.81	\$1.93	\$2.01	\$2.10	\$2.20	\$2.31	\$2.42	\$2.55	\$2.69	\$2.83	\$2.99	\$3.14	\$3.31	\$106.27			
Hawaiian Electric Industries, Inc.	HE	\$1.12	\$1.19	\$1.27	\$1.35	\$1.45	\$1.54	\$1.64	\$1.75	\$1.86	\$1.98	\$2.10	\$2.21	\$2.33	\$2.45	\$2.58	\$77.41			
Northwestern Corporation	NWE	\$2.28	\$2.38	\$2.48	\$2.58	\$2.63	\$2.70	\$2.78	\$2.87	\$2.98	\$3.11	\$3.26	\$3.43	\$3.61	\$3.80	\$4.01	\$126.76			
OGE Energy Corp.	OGE	\$1.52	\$1.61	\$1.70	\$1.79	\$1.87	\$1.95	\$2.04	\$2.12	\$2.21	\$2.30	\$2.40	\$2.53	\$2.66	\$2.80	\$2.95	\$82.72			
PNM Resources, Inc.	PNM	\$1.07	\$1.13	\$1.19	\$1.25	\$1.38	\$1.51	\$1.66	\$1.82	\$1.99	\$2.17	\$2.37	\$2.49	\$2.62	\$2.76	\$2.91	\$91.44			
Pinnacle West Capital Corporation	PNW	\$3.02	\$3.17	\$3.33	\$3.49	\$3.69	\$3.91	\$4.14	\$4.39	\$4.65	\$4.93	\$5.24	\$5.52	\$5.81	\$6.12	\$6.44	\$181.94			
Projected Annual Data Investor Cash Flows		[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]		
Company	Ticker	Initial Outflow	2/15/19	12/31/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	6/30/33		
ALLETE, Inc.	ALE	(\$75.79)	\$0.00	\$1.98	\$2.32	\$2.49	\$2.61	\$2.73	\$2.86	\$2.99	\$3.14	\$3.30	\$3.47	\$3.65	\$3.84	\$4.05	\$4.26	\$161.42		
Black Hills Corporation	BKH	(\$66.04)	\$0.00	\$1.93	\$2.27	\$2.39	\$2.48	\$2.67	\$2.87	\$3.08	\$3.31	\$3.55	\$3.82	\$4.09	\$4.31	\$4.54	\$4.78	\$145.51		
El Paso Electric Company	EE	(\$51.24)	\$0.00	\$1.40	\$1.64	\$1.81	\$1.93	\$2.01	\$2.10	\$2.20	\$2.31	\$2.42	\$2.55	\$2.69	\$2.83	\$2.99	\$3.14	\$109.58		
Hawaiian Electric Industries, Inc.	HE	(\$36.69)	\$0.00	\$0.98	\$1.16	\$1.27	\$1.35	\$1.45	\$1.54	\$1.64	\$1.75	\$1.86	\$1.98	\$2.10	\$2.21	\$2.33	\$2.45	\$79.99		
Northwestern Corporation	NWE	(\$62.50)	\$0.00	\$2.00	\$2.31	\$2.48	\$2.58	\$2.63	\$2.70	\$2.78	\$2.87	\$2.98	\$3.11	\$3.26	\$3.43	\$3.61	\$3.80	\$130.77		
OGE Energy Corp.	OGE	(\$40.48)	\$0.00	\$1.33	\$1.56	\$1.70	\$1.79	\$1.87	\$1.95	\$2.04	\$2.12	\$2.21	\$2.30	\$2.40	\$2.53	\$2.66	\$2.80	\$85.67		
PNM Resources, Inc.	PNM	(\$41.99)	\$0.00	\$0.93	\$1.10	\$1.19	\$1.25	\$1.38	\$1.51	\$1.66	\$1.82	\$1.99	\$2.17	\$2.37	\$2.49	\$2.62	\$2.76	\$94.35		
Pinnacle West Capital Corporation	PNW	(\$86.95)	\$0.00	\$2.64	\$3.10	\$3.33	\$3.49	\$3.69	\$3.91	\$4.14	\$4.39	\$4.65	\$4.93	\$5.24	\$5.52	\$5.81	\$6.12	\$188.38		

Multi-Stage Growth Discounted Cash Flow Model  
 30 Day Average Stock Price  
 High EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]				
Company	Ticker	Stock Price	EPS Growth Rate Estimates			Long-Term Growth	Payout Ratio			Iterative Solution		Terminal P/E Ratio	Terminal PEG Ratio					
			Zacks	First Call	Line		High Growth	2019	2022	2029	Proof			IRR				
ALLETE, Inc.	ALE	\$75.79	NA	6.00%	3.50%	6.00%	5.32%	66.00%	66.00%	65.57%	\$0.00	8.63%	20.86	3.92				
Black Hills Corporation	BKH	\$66.05	4.70%	4.46%	6.50%	6.50%	5.32%	59.00%	57.00%	65.57%	\$0.00	9.46%	16.67	3.13				
El Paso Electric Company	EE	\$51.25	4.40%	5.10%	3.00%	5.10%	5.32%	61.00%	65.00%	65.57%	\$0.00	8.84%	19.62	3.69				
Hawaiian Electric Industries, Inc.	HE	\$36.89	6.40%	7.80%	3.50%	7.80%	5.32%	61.00%	62.00%	65.57%	\$0.00	9.35%	17.13	3.22				
Northwestern Corporation	NWE	\$62.50	2.80%	2.59%	2.50%	2.60%	5.32%	65.00%	68.00%	65.57%	\$0.00	8.66%	20.88	3.89				
OGE Energy Corp.	OGE	\$40.48	5.20%	NA	6.00%	6.00%	5.32%	71.00%	71.00%	65.57%	\$0.00	9.19%	17.85	3.36				
PNM Resources, Inc.	PNM	\$41.99	4.70%	4.10%	7.50%	7.50%	5.32%	50.00%	50.00%	65.57%	\$0.00	9.21%	17.76	3.34				
Pinnacle West Capital Corporation	PNW	\$86.95	4.60%	4.16%	6.00%	6.00%	5.32%	62.00%	62.00%	65.57%	\$0.00	9.36%	17.10	3.22				
												Including Flotation Costs						
												Mean	9.09%	18.46	9.22%			
												Max	9.46%		9.59%			
												Min	8.63%		8.76%			
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
ALLETE, Inc.	ALE	\$3.13	\$3.32	\$3.52	\$3.73	\$3.95	\$4.19	\$4.44	\$4.70	\$4.97	\$5.25	\$5.55	\$5.85	\$6.16	\$6.49	\$6.83	\$7.19	\$7.58
Black Hills Corporation	BKH	\$3.38	\$3.60	\$3.83	\$4.08	\$4.35	\$4.63	\$4.93	\$5.24	\$5.56	\$5.89	\$6.23	\$6.57	\$6.92	\$7.29	\$7.68	\$8.08	\$8.51
El Paso Electric Company	EE	\$2.42	\$2.54	\$2.67	\$2.81	\$2.95	\$3.10	\$3.26	\$3.43	\$3.61	\$3.79	\$3.99	\$4.20	\$4.43	\$4.66	\$4.91	\$5.17	\$5.45
Hawaiian Electric Industries, Inc.	HE	\$1.64	\$1.77	\$1.91	\$2.05	\$2.21	\$2.39	\$2.57	\$2.76	\$2.96	\$3.15	\$3.34	\$3.54	\$3.72	\$3.92	\$4.13	\$4.35	\$4.58
Northwestern Corporation	NWE	\$3.34	\$3.43	\$3.52	\$3.61	\$3.70	\$3.80	\$3.90	\$4.02	\$4.16	\$4.32	\$4.51	\$4.73	\$4.98	\$5.25	\$5.53	\$5.82	\$6.13
OGE Energy Corp.	OGE	\$1.92	\$2.04	\$2.16	\$2.29	\$2.42	\$2.57	\$2.72	\$2.88	\$3.05	\$3.22	\$3.40	\$3.59	\$3.78	\$3.98	\$4.19	\$4.41	\$4.65
PNM Resources, Inc.	PNM	\$1.92	\$2.06	\$2.22	\$2.39	\$2.56	\$2.76	\$2.96	\$3.17	\$3.39	\$3.61	\$3.82	\$4.04	\$4.26	\$4.48	\$4.72	\$4.97	\$5.24
Pinnacle West Capital Corporation	PNW	\$4.43	\$4.70	\$4.98	\$5.28	\$5.59	\$5.93	\$6.28	\$6.65	\$7.04	\$7.44	\$7.85	\$8.27	\$8.72	\$9.18	\$9.67	\$10.18	\$10.72
Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]		
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
ALLETE, Inc.	ALE	66.00%	66.00%	66.00%	66.00%	65.94%	65.88%	65.82%	65.75%	65.69%	65.63%	65.57%	65.57%	65.57%	65.57%	65.57%		
Black Hills Corporation	BKH	59.00%	58.33%	57.67%	57.00%	58.22%	59.45%	60.67%	61.90%	63.12%	64.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
El Paso Electric Company	EE	61.00%	62.33%	63.67%	65.00%	65.08%	65.16%	65.24%	65.33%	65.41%	65.49%	65.57%	65.57%	65.57%	65.57%	65.57%		
Hawaiian Electric Industries, Inc.	HE	61.00%	61.33%	61.67%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Northwestern Corporation	NWE	65.00%	66.00%	67.00%	68.00%	67.65%	67.31%	66.96%	66.61%	66.26%	65.92%	65.57%	65.57%	65.57%	65.57%	65.57%		
OGE Energy Corp.	OGE	71.00%	71.00%	71.00%	71.00%	70.22%	69.45%	68.67%	67.90%	67.12%	66.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
PNM Resources, Inc.	PNM	50.00%	50.00%	50.00%	50.00%	52.22%	54.45%	56.67%	58.90%	61.12%	63.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
Pinnacle West Capital Corporation	PNW	62.00%	62.00%	62.00%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Projected Annual Cash Flows		[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal Value	
ALLETE, Inc.	ALE	\$2.32	\$2.46	\$2.61	\$2.76	\$2.93	\$3.10	\$3.27	\$3.45	\$3.64	\$3.84	\$4.04	\$4.25	\$4.48	\$4.72	\$4.97	\$158.03	
Black Hills Corporation	BKH	\$2.26	\$2.38	\$2.51	\$2.64	\$2.87	\$3.12	\$3.38	\$3.65	\$3.93	\$4.23	\$4.54	\$4.78	\$5.03	\$5.30	\$5.58	\$141.93	
El Paso Electric Company	EE	\$1.63	\$1.75	\$1.88	\$2.02	\$2.12	\$2.23	\$2.35	\$2.48	\$2.61	\$2.75	\$2.90	\$3.06	\$3.22	\$3.39	\$3.57	\$106.87	
Hawaiian Electric Industries, Inc.	HE	\$1.16	\$1.26	\$1.37	\$1.48	\$1.61	\$1.74	\$1.88	\$2.02	\$2.16	\$2.30	\$2.44	\$2.57	\$2.71	\$2.85	\$3.00	\$78.49	
Northwestern Corporation	NWE	\$2.29	\$2.38	\$2.48	\$2.58	\$2.64	\$2.70	\$2.78	\$2.88	\$2.99	\$3.12	\$3.27	\$3.44	\$3.62	\$3.82	\$4.02	\$126.78	
OGE Energy Corp.	OGE	\$1.53	\$1.62	\$1.72	\$1.82	\$1.91	\$2.00	\$2.09	\$2.19	\$2.28	\$2.38	\$2.48	\$2.61	\$2.75	\$2.89	\$3.05	\$82.93	
PNM Resources, Inc.	PNM	\$1.11	\$1.19	\$1.28	\$1.38	\$1.55	\$1.73	\$1.92	\$2.12	\$2.34	\$2.56	\$2.79	\$2.94	\$3.10	\$3.26	\$3.43	\$93.03	
Pinnacle West Capital Corporation	PNW	\$3.09	\$3.27	\$3.47	\$3.68	\$3.93	\$4.19	\$4.47	\$4.76	\$5.07	\$5.38	\$5.71	\$6.02	\$6.34	\$6.68	\$7.03	\$183.37	
Projected Annual Data Investor Cash Flows		[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
Company	Ticker	Initial Outflow	2/15/19	12/31/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	6/30/33
ALLETE, Inc.	ALE	(\$75.79)	\$0.00	\$2.03	\$2.39	\$2.61	\$2.76	\$2.93	\$3.10	\$3.27	\$3.45	\$3.64	\$3.84	\$4.04	\$4.25	\$4.48	\$4.72	\$163.00
Black Hills Corporation	BKH	(\$66.04)	\$0.00	\$1.98	\$2.34	\$2.51	\$2.64	\$2.87	\$3.12	\$3.38	\$3.65	\$3.93	\$4.23	\$4.54	\$4.78	\$5.03	\$5.30	\$147.51
El Paso Electric Company	EE	(\$51.24)	\$0.00	\$1.43	\$1.67	\$1.88	\$2.02	\$2.12	\$2.23	\$2.35	\$2.48	\$2.61	\$2.75	\$2.90	\$3.06	\$3.22	\$3.39	\$110.44
Hawaiian Electric Industries, Inc.	HE	(\$36.69)	\$0.00	\$1.02	\$1.21	\$1.37	\$1.48	\$1.61	\$1.74	\$1.88	\$2.02	\$2.16	\$2.30	\$2.44	\$2.57	\$2.71	\$2.85	\$81.50
Northwestern Corporation	NWE	(\$62.50)	\$0.00	\$2.00	\$2.32	\$2.48	\$2.58	\$2.64	\$2.70	\$2.78	\$2.88	\$2.99	\$3.12	\$3.27	\$3.44	\$3.62	\$3.82	\$130.80
OGE Energy Corp.	OGE	(\$40.48)	\$0.00	\$1.34	\$1.58	\$1.72	\$1.82	\$1.91	\$2.00	\$2.09	\$2.19	\$2.28	\$2.38	\$2.48	\$2.61	\$2.75	\$2.89	\$85.97
PNM Resources, Inc.	PNM	(\$41.98)	\$0.00	\$0.97	\$1.15	\$1.28	\$1.38	\$1.55	\$1.73	\$1.92	\$2.12	\$2.34	\$2.56	\$2.79	\$2.94	\$3.10	\$3.26	\$96.46
Pinnacle West Capital Corporation	PNW	(\$86.95)	\$0.00	\$2.70	\$3.18	\$3.47	\$3.68	\$3.93	\$4.19	\$4.47	\$4.76	\$5.07	\$5.38	\$5.71	\$6.02	\$6.34	\$6.68	\$190.40

Multi-Stage Growth Discounted Cash Flow Model  
 30 Day Average Stock Price  
 Low EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]					
Company	Ticker	Stock Price	Zacks	EPS Growth Rate Estimates			Long-Term Growth	Payout Ratio			Iterative Solution		Terminal P/E Ratio	Terminal PEG Ratio					
				First Call	Line	Low Growth		2019	2022	2029	Proof	IRR							
ALLETE, Inc.	ALE	\$75.79	NA	6.00%	3.50%	3.50%	5.32%	66.00%	66.00%	65.57%	\$0.00	8.06%	25.22	4.74					
Black Hills Corporation	BKH	\$66.05	4.70%	4.46%	6.50%	4.46%	5.32%	59.00%	57.00%	65.57%	\$0.00	8.89%	19.34	3.64					
El Paso Electric Company	EE	\$51.25	4.40%	5.10%	3.00%	3.00%	5.32%	61.00%	65.00%	65.57%	\$0.00	8.32%	23.01	4.33					
Hawaiian Electric Industries, Inc.	HE	\$36.89	6.40%	7.80%	3.50%	3.50%	5.32%	61.00%	62.00%	65.57%	\$0.00	8.25%	23.54	4.43					
Northwestern Corporation	NWE	\$62.50	2.80%	2.59%	2.50%	2.50%	5.32%	65.00%	68.00%	65.57%	\$0.00	8.63%	20.85	3.92					
OGE Energy Corp.	OGE	\$40.48	5.20%	NA	6.00%	5.20%	5.32%	71.00%	71.00%	65.57%	\$0.00	8.96%	18.94	3.56					
PNM Resources, Inc.	PNM	\$41.99	4.70%	4.10%	7.50%	4.10%	5.32%	50.00%	50.00%	65.57%	\$0.00	8.36%	22.72	4.27					
Pinnacle West Capital Corporation	PNW	\$86.95	4.60%	4.16%	6.00%	4.16%	5.32%	62.00%	62.00%	65.57%	\$0.00	8.84%	19.59	3.68					
											Mean	8.54%	21.65	8.67%					
											Max	8.96%		9.09%					
											Min	8.06%		8.19%					
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	
ALLETE, Inc.	ALE	\$3.13	\$3.24	\$3.35	\$3.47	\$3.59	\$3.72	\$3.85	\$3.99	\$4.16	\$4.34	\$4.55	\$4.77	\$5.03	\$5.29	\$5.58	\$5.87	\$6.19	
Black Hills Corporation	BKH	\$3.38	\$3.53	\$3.69	\$3.85	\$4.02	\$4.20	\$4.39	\$4.59	\$4.81	\$5.05	\$5.30	\$5.58	\$5.87	\$6.18	\$6.51	\$6.86	\$7.22	
El Paso Electric Company	EE	\$2.42	\$2.49	\$2.57	\$2.64	\$2.72	\$2.81	\$2.89	\$2.99	\$3.10	\$3.23	\$3.38	\$3.54	\$3.73	\$3.93	\$4.14	\$4.36	\$4.59	
Hawaiian Electric Industries, Inc.	HE	\$1.64	\$1.70	\$1.76	\$1.82	\$1.88	\$1.95	\$2.02	\$2.09	\$2.18	\$2.27	\$2.38	\$2.50	\$2.63	\$2.77	\$2.92	\$3.08	\$3.24	
Northwestern Corporation	NWE	\$3.34	\$3.42	\$3.51	\$3.60	\$3.69	\$3.78	\$3.87	\$3.99	\$4.13	\$4.29	\$4.47	\$4.69	\$4.94	\$5.20	\$5.48	\$5.77	\$6.08	
OGE Energy Corp.	OGE	\$1.92	\$2.02	\$2.12	\$2.24	\$2.35	\$2.47	\$2.60	\$2.74	\$2.88	\$3.03	\$3.19	\$3.36	\$3.54	\$3.73	\$3.93	\$4.14	\$4.36	
PNM Resources, Inc.	PNM	\$1.92	\$2.00	\$2.08	\$2.17	\$2.25	\$2.35	\$2.44	\$2.55	\$2.66	\$2.79	\$2.93	\$3.08	\$3.24	\$3.41	\$3.59	\$3.78	\$3.98	
Pinnacle West Capital Corporation	PNW	\$4.43	\$4.61	\$4.81	\$5.01	\$5.21	\$5.43	\$5.66	\$5.90	\$6.17	\$6.46	\$6.78	\$7.13	\$7.51	\$7.91	\$8.33	\$8.77	\$9.24	
Projected Annual Dividend Payout Ratio			[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]		
Company	Ticker		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
ALLETE, Inc.	ALE		66.00%	66.00%	66.00%	66.00%	65.94%	65.88%	65.82%	65.75%	65.69%	65.63%	65.57%	65.57%	65.57%	65.57%	65.57%		
Black Hills Corporation	BKH		59.00%	58.33%	57.67%	57.00%	58.22%	59.45%	60.67%	61.90%	63.12%	64.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
El Paso Electric Company	EE		61.00%	62.33%	63.67%	65.00%	65.08%	65.16%	65.24%	65.33%	65.41%	65.49%	65.57%	65.57%	65.57%	65.57%	65.57%		
Hawaiian Electric Industries, Inc.	HE		61.00%	61.33%	61.67%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Northwestern Corporation	NWE		65.00%	66.00%	67.00%	68.00%	67.65%	67.31%	66.96%	66.61%	66.26%	65.92%	65.57%	65.57%	65.57%	65.57%	65.57%		
OGE Energy Corp.	OGE		71.00%	71.00%	71.00%	71.00%	70.22%	69.45%	68.67%	67.90%	67.12%	66.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
PNM Resources, Inc.	PNM		50.00%	50.00%	50.00%	50.00%	52.22%	54.45%	56.67%	58.90%	61.12%	63.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
Pinnacle West Capital Corporation	PNW		62.00%	62.00%	62.00%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Projected Annual Cash Flows			[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	
Company	Ticker		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal Value	
ALLETE, Inc.	ALE		\$2.21	\$2.29	\$2.37	\$2.45	\$2.54	\$2.63	\$2.74	\$2.85	\$2.99	\$3.13	\$3.30	\$3.47	\$3.66	\$3.85	\$4.06	\$155.97	
Black Hills Corporation	BKH		\$2.18	\$2.25	\$2.32	\$2.40	\$2.56	\$2.73	\$2.92	\$3.12	\$3.35	\$3.59	\$3.85	\$4.05	\$4.27	\$4.50	\$4.74	\$139.69	
El Paso Electric Company	EE		\$1.57	\$1.65	\$1.73	\$1.82	\$1.88	\$1.95	\$2.02	\$2.11	\$2.21	\$2.32	\$2.45	\$2.58	\$2.71	\$2.86	\$3.01	\$105.60	
Hawaiian Electric Industries, Inc.	HE		\$1.07	\$1.12	\$1.16	\$1.21	\$1.26	\$1.32	\$1.38	\$1.46	\$1.54	\$1.63	\$1.73	\$1.82	\$1.92	\$2.02	\$2.13	\$76.30	
Northwestern Corporation	NWE		\$2.28	\$2.37	\$2.47	\$2.57	\$2.62	\$2.68	\$2.76	\$2.86	\$2.97	\$3.09	\$3.24	\$3.41	\$3.59	\$3.78	\$3.99	\$126.72	
OGE Energy Corp.	OGE		\$1.51	\$1.59	\$1.67	\$1.76	\$1.83	\$1.90	\$1.98	\$2.06	\$2.14	\$2.23	\$2.32	\$2.45	\$2.58	\$2.71	\$2.86	\$82.53	
PNM Resources, Inc.	PNM		\$1.04	\$1.08	\$1.13	\$1.17	\$1.28	\$1.39	\$1.51	\$1.64	\$1.79	\$1.95	\$2.12	\$2.24	\$2.36	\$2.48	\$2.61	\$90.55	
Pinnacle West Capital Corporation	PNW		\$2.98	\$3.10	\$3.23	\$3.37	\$3.54	\$3.72	\$3.92	\$4.14	\$4.38	\$4.64	\$4.92	\$5.19	\$5.46	\$5.75	\$6.06	\$181.02	
Projected Annual Data Investor Cash Flows			[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
Company	Ticker		Initial Outflow	2/15/19	12/31/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	6/30/33
ALLETE, Inc.	ALE		(\$75.79)	\$0.00	\$1.93	\$2.25	\$2.37	\$2.45	\$2.54	\$2.63	\$2.74	\$2.85	\$2.99	\$3.13	\$3.30	\$3.47	\$3.66	\$3.85	\$160.03
Black Hills Corporation	BKH		(\$66.04)	\$0.00	\$1.90	\$2.22	\$2.32	\$2.40	\$2.56	\$2.73	\$2.92	\$3.12	\$3.35	\$3.59	\$3.85	\$4.05	\$4.27	\$4.50	\$144.43
El Paso Electric Company	EE		(\$51.24)	\$0.00	\$1.37	\$1.59	\$1.73	\$1.82	\$1.88	\$1.95	\$2.02	\$2.11	\$2.21	\$2.32	\$2.45	\$2.58	\$2.71	\$2.86	\$108.61
Hawaiian Electric Industries, Inc.	HE		(\$36.69)	\$0.00	\$0.94	\$1.09	\$1.16	\$1.21	\$1.26	\$1.32	\$1.38	\$1.46	\$1.54	\$1.63	\$1.73	\$1.82	\$1.92	\$2.02	\$78.43
Northwestern Corporation	NWE		(\$62.50)	\$0.00	\$1.99	\$2.31	\$2.47	\$2.57	\$2.62	\$2.68	\$2.76	\$2.86	\$2.97	\$3.09	\$3.24	\$3.41	\$3.59	\$3.78	\$130.70
OGE Energy Corp.	OGE		(\$40.48)	\$0.00	\$1.32	\$1.55	\$1.67	\$1.76	\$1.83	\$1.90	\$1.98	\$2.06	\$2.14	\$2.23	\$2.32	\$2.45	\$2.58	\$2.71	\$85.39
PNM Resources, Inc.	PNM		(\$41.99)	\$0.00	\$0.91	\$1.06	\$1.13	\$1.17	\$1.28	\$1.39	\$1.51	\$1.64	\$1.79	\$1.95	\$2.12	\$2.24	\$2.36	\$2.48	\$93.16
Pinnacle West Capital Corporation	PNW		(\$86.95)	\$0.00	\$2.60	\$3.04	\$3.23	\$3.37	\$3.54	\$3.72	\$3.92	\$4.14	\$4.38	\$4.64	\$4.92	\$5.19	\$5.46	\$5.75	\$187.08

Multi-Stage Growth Discounted Cash Flow Model  
 90 Day Average Stock Price  
 Average EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]					
Company	Ticker	Stock Price	EPS Growth Rate Estimates				Long-Term Value	Payout Ratio			Iterative Solution		Terminal P/E Ratio	Terminal PEG Ratio					
			Zacks	First Call	Line	Average		Growth	2019	2022	2029	Proof			IRR				
ALLETE, Inc.	ALE	\$76.90	NA	6.00%	3.50%	4.75%	5.32%	66.00%	66.00%	65.57%	\$0.00	8.29%	23.25	4.37					
Black Hills Corporation	BKH	\$64.12	4.70%	4.46%	6.50%	5.22%	5.32%	59.00%	57.00%	65.57%	\$0.00	9.21%	17.76	3.34					
El Paso Electric Company	EE	\$54.34	4.40%	5.10%	3.00%	4.17%	5.32%	61.00%	65.00%	65.57%	\$0.00	8.41%	22.33	4.20					
Hawaiian Electric Industries, Inc.	HE	\$37.01	6.40%	7.80%	3.50%	5.90%	5.32%	61.00%	62.00%	65.57%	\$0.00	8.80%	19.83	3.73					
Northwestern Corporation	NWE	\$61.78	2.80%	2.59%	2.50%	2.56%	5.32%	65.00%	68.00%	65.57%	\$0.00	8.69%	20.49	3.85					
OGE Energy Corp.	OGE	\$39.18	5.20%	NA	6.00%	5.60%	5.32%	71.00%	71.00%	65.57%	\$0.00	9.20%	17.78	3.34					
PNM Resources, Inc.	PNM	\$41.40	4.70%	4.10%	7.50%	5.43%	5.32%	50.00%	50.00%	65.57%	\$0.00	8.72%	20.32	3.82					
Pinnacle West Capital Corporation	PNW	\$86.69	4.60%	4.16%	6.00%	4.92%	5.32%	62.00%	62.00%	65.57%	\$0.00	9.06%	18.46	3.47	Including Flotation Costs				
											Mean	8.80%	20.03						
											Max	9.21%							
											Min	8.29%							
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	
ALLETE, Inc.	ALE	\$3.13	\$3.28	\$3.43	\$3.60	\$3.77	\$3.95	\$4.13	\$4.34	\$4.55	\$4.78	\$5.02	\$5.29	\$5.57	\$5.86	\$6.17	\$6.50	\$6.85	
Black Hills Corporation	BKH	\$3.38	\$3.56	\$3.74	\$3.94	\$4.14	\$4.36	\$4.59	\$4.83	\$5.08	\$5.35	\$5.63	\$5.93	\$6.24	\$6.58	\$6.93	\$7.29	\$7.68	
El Paso Electric Company	EE	\$2.42	\$2.52	\$2.63	\$2.74	\$2.85	\$2.97	\$3.09	\$3.23	\$3.37	\$3.53	\$3.71	\$3.90	\$4.10	\$4.32	\$4.55	\$4.80	\$5.05	
Hawaiian Electric Industries, Inc.	HE	\$1.64	\$1.74	\$1.84	\$1.95	\$2.06	\$2.18	\$2.31	\$2.45	\$2.59	\$2.73	\$2.88	\$3.04	\$3.20	\$3.37	\$3.55	\$3.74	\$3.94	
Northwestern Corporation	NWE	\$3.34	\$3.43	\$3.51	\$3.60	\$3.70	\$3.79	\$3.89	\$4.01	\$4.14	\$4.31	\$4.50	\$4.72	\$4.97	\$5.23	\$5.51	\$5.80	\$6.11	
OGE Energy Corp.	OGE	\$1.92	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.13	\$3.30	\$3.47	\$3.66	\$3.85	\$4.06	\$4.27	\$4.50	
PNM Resources, Inc.	PNM	\$1.92	\$2.02	\$2.13	\$2.25	\$2.37	\$2.50	\$2.64	\$2.78	\$2.93	\$3.09	\$3.25	\$3.43	\$3.61	\$3.80	\$4.00	\$4.22	\$4.44	
Pinnacle West Capital Corporation	PNW	\$4.43	\$4.65	\$4.88	\$5.12	\$5.37	\$5.63	\$5.91	\$6.20	\$6.52	\$6.85	\$7.21	\$7.59	\$7.99	\$8.41	\$8.86	\$9.33	\$9.83	
Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]			
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033			
ALLETE, Inc.	ALE	66.00%	66.00%	66.00%	66.00%	65.94%	65.88%	65.82%	65.75%	65.69%	65.63%	65.57%	65.57%	65.57%	65.57%	65.57%			
Black Hills Corporation	BKH	59.00%	58.33%	57.67%	57.00%	58.22%	59.45%	60.67%	61.90%	63.12%	64.35%	65.57%	65.57%	65.57%	65.57%	65.57%			
El Paso Electric Company	EE	61.00%	62.33%	63.67%	65.00%	65.08%	65.16%	65.24%	65.33%	65.41%	65.49%	65.57%	65.57%	65.57%	65.57%	65.57%			
Hawaiian Electric Industries, Inc.	HE	61.00%	61.33%	61.67%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%			
Northwestern Corporation	NWE	65.00%	66.00%	67.00%	68.00%	67.65%	67.31%	66.96%	66.61%	66.26%	65.92%	65.57%	65.57%	65.57%	65.57%	65.57%			
OGE Energy Corp.	OGE	71.00%	71.00%	71.00%	71.00%	70.22%	69.45%	68.67%	67.90%	67.12%	66.35%	65.57%	65.57%	65.57%	65.57%	65.57%			
PNM Resources, Inc.	PNM	50.00%	50.00%	50.00%	50.00%	52.22%	54.45%	56.67%	58.90%	61.12%	63.35%	65.57%	65.57%	65.57%	65.57%	65.57%			
Pinnacle West Capital Corporation	PNW	62.00%	62.00%	62.00%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%			
Projected Annual Cash Flows		[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]		
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal Value		
ALLETE, Inc.	ALE	\$2.27	\$2.37	\$2.49	\$2.61	\$2.73	\$2.86	\$2.99	\$3.14	\$3.30	\$3.47	\$3.65	\$3.84	\$4.05	\$4.26	\$4.49	\$159.27		
Black Hills Corporation	BKH	\$2.21	\$2.30	\$2.39	\$2.48	\$2.67	\$2.87	\$3.08	\$3.31	\$3.55	\$3.82	\$4.09	\$4.31	\$4.54	\$4.78	\$5.04	\$136.41		
El Paso Electric Company	EE	\$1.60	\$1.70	\$1.81	\$1.93	\$2.01	\$2.10	\$2.20	\$2.31	\$2.42	\$2.55	\$2.69	\$2.83	\$2.99	\$3.14	\$3.31	\$112.78		
Hawaiian Electric Industries, Inc.	HE	\$1.12	\$1.19	\$1.27	\$1.35	\$1.45	\$1.54	\$1.64	\$1.75	\$1.86	\$1.98	\$2.10	\$2.21	\$2.33	\$2.45	\$2.58	\$78.08		
Northwestern Corporation	NWE	\$2.28	\$2.38	\$2.48	\$2.58	\$2.63	\$2.70	\$2.78	\$2.87	\$2.98	\$3.11	\$3.26	\$3.43	\$3.61	\$3.80	\$4.01	\$125.24		
OGE Energy Corp.	OGE	\$1.52	\$1.61	\$1.70	\$1.79	\$1.87	\$1.95	\$2.04	\$2.12	\$2.21	\$2.30	\$2.40	\$2.53	\$2.66	\$2.80	\$2.95	\$80.00		
PNM Resources, Inc.	PNM	\$1.07	\$1.13	\$1.19	\$1.25	\$1.38	\$1.51	\$1.66	\$1.82	\$1.99	\$2.17	\$2.37	\$2.49	\$2.62	\$2.76	\$2.91	\$90.20		
Pinnacle West Capital Corporation	PNW	\$3.02	\$3.17	\$3.33	\$3.49	\$3.69	\$3.91	\$4.14	\$4.39	\$4.65	\$4.93	\$5.24	\$5.52	\$5.81	\$6.12	\$6.44	\$181.40		
Projected Annual Data Investor Cash Flows		[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	
Company	Ticker	Initial Outflow	2/15/19	12/31/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	6/30/33	
ALLETE, Inc.	ALE	(\$76.90)	\$0.00	\$1.98	\$2.32	\$2.49	\$2.61	\$2.73	\$2.86	\$2.99	\$3.14	\$3.30	\$3.47	\$3.65	\$3.84	\$4.05	\$4.26	\$163.76	
Black Hills Corporation	BKH	(\$64.12)	\$0.00	\$1.93	\$2.27	\$2.39	\$2.48	\$2.67	\$2.87	\$3.08	\$3.31	\$3.55	\$3.82	\$4.09	\$4.31	\$4.54	\$4.78	\$141.45	
El Paso Electric Company	EE	(\$54.34)	\$0.00	\$1.40	\$1.64	\$1.81	\$1.93	\$2.01	\$2.10	\$2.20	\$2.31	\$2.42	\$2.55	\$2.69	\$2.83	\$2.99	\$3.14	\$116.10	
Hawaiian Electric Industries, Inc.	HE	(\$37.01)	\$0.00	\$0.98	\$1.16	\$1.27	\$1.35	\$1.45	\$1.54	\$1.64	\$1.75	\$1.86	\$1.98	\$2.10	\$2.21	\$2.33	\$2.45	\$80.66	
Northwestern Corporation	NWE	(\$61.78)	\$0.00	\$2.00	\$2.31	\$2.48	\$2.58	\$2.63	\$2.70	\$2.78	\$2.87	\$2.98	\$3.11	\$3.26	\$3.43	\$3.61	\$3.80	\$129.24	
OGE Energy Corp.	OGE	(\$39.18)	\$0.00	\$1.33	\$1.56	\$1.70	\$1.79	\$1.87	\$1.95	\$2.04	\$2.12	\$2.21	\$2.30	\$2.40	\$2.53	\$2.66	\$2.80	\$82.95	
PNM Resources, Inc.	PNM	(\$41.40)	\$0.00	\$0.93	\$1.10	\$1.19	\$1.25	\$1.38	\$1.51	\$1.66	\$1.82	\$1.99	\$2.17	\$2.37	\$2.49	\$2.62	\$2.76	\$93.11	
Pinnacle West Capital Corporation	PNW	(\$86.69)	\$0.00	\$2.64	\$3.10	\$3.33	\$3.49	\$3.69	\$3.91	\$4.14	\$4.39	\$4.65	\$4.93	\$5.24	\$5.52	\$5.81	\$6.12	\$187.85	

Multi-Stage Growth Discounted Cash Flow Model  
 90 Day Average Stock Price  
 High EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]				
Company	Ticker	Stock Price	Zacks	EPS Growth Rate Estimates			Long-Term Growth	Payout Ratio			Iterative Solution		Terminal P/E Ratio	Terminal PEG Ratio				
				First Call	Line	High Growth		2019	2022	2029	Proof	IRR						
ALLETE, Inc.	ALE	\$76.90	NA	6.00%	3.50%	6.00%	5.32%	66.00%	66.00%	65.57%	\$0.00	8.58%	21.17	3.98				
Black Hills Corporation	BKH	\$64.12	4.70%	4.46%	6.50%	6.50%	5.32%	59.00%	57.00%	65.57%	\$0.00	9.58%	16.19	3.04				
El Paso Electric Company	EE	\$54.34	4.40%	5.10%	3.00%	5.10%	5.32%	61.00%	65.00%	65.57%	\$0.00	8.64%	20.81	3.91				
Hawaiian Electric Industries, Inc.	HE	\$37.01	6.40%	7.80%	3.50%	7.80%	5.32%	61.00%	62.00%	65.57%	\$0.00	9.31%	17.28	3.25				
Northwestern Corporation	NWE	\$61.78	2.80%	2.59%	2.50%	2.60%	5.32%	65.00%	68.00%	65.57%	\$0.00	8.70%	20.44	3.84				
OGE Energy Corp.	OGE	\$39.18	5.20%	NA	6.00%	6.00%	5.32%	71.00%	71.00%	65.57%	\$0.00	9.32%	17.26	3.25				
PNM Resources, Inc.	PNM	\$41.40	4.70%	4.10%	7.50%	7.50%	5.32%	50.00%	50.00%	65.57%	\$0.00	9.26%	17.52	3.30				
Pinnacle West Capital Corporation	PNW	\$86.69	4.60%	4.16%	6.00%	6.00%	5.32%	62.00%	62.00%	65.57%	\$0.00	9.37%	17.05	3.21				
											Mean	9.09%	18.47	9.22%				
											Max	9.58%		9.71%				
											Min	8.58%		8.71%				
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
ALLETE, Inc.	ALE	\$3.13	\$3.32	\$3.52	\$3.73	\$3.95	\$4.19	\$4.44	\$4.70	\$4.97	\$5.25	\$5.55	\$5.85	\$6.16	\$6.49	\$6.83	\$7.19	\$7.58
Black Hills Corporation	BKH	\$3.38	\$3.60	\$3.83	\$4.08	\$4.35	\$4.63	\$4.93	\$5.24	\$5.56	\$5.89	\$6.23	\$6.57	\$6.92	\$7.29	\$7.68	\$8.08	\$8.51
El Paso Electric Company	EE	\$2.42	\$2.54	\$2.67	\$2.81	\$2.95	\$3.10	\$3.26	\$3.43	\$3.61	\$3.79	\$3.99	\$4.20	\$4.43	\$4.66	\$4.91	\$5.17	\$5.45
Hawaiian Electric Industries, Inc.	HE	\$1.64	\$1.77	\$1.91	\$2.05	\$2.21	\$2.39	\$2.57	\$2.76	\$2.96	\$3.15	\$3.34	\$3.54	\$3.72	\$3.92	\$4.13	\$4.35	\$4.58
Northwestern Corporation	NWE	\$3.34	\$3.43	\$3.52	\$3.61	\$3.70	\$3.80	\$3.90	\$4.02	\$4.16	\$4.32	\$4.51	\$4.73	\$4.98	\$5.25	\$5.53	\$5.82	\$6.13
OGE Energy Corp.	OGE	\$1.92	\$2.04	\$2.16	\$2.29	\$2.42	\$2.57	\$2.72	\$2.88	\$3.05	\$3.22	\$3.40	\$3.59	\$3.78	\$3.98	\$4.19	\$4.41	\$4.65
PNM Resources, Inc.	PNM	\$1.92	\$2.06	\$2.22	\$2.39	\$2.56	\$2.76	\$2.96	\$3.17	\$3.39	\$3.61	\$3.82	\$4.04	\$4.26	\$4.48	\$4.72	\$4.97	\$5.24
Pinnacle West Capital Corporation	PNW	\$4.43	\$4.70	\$4.98	\$5.28	\$5.59	\$5.93	\$6.28	\$6.65	\$7.04	\$7.44	\$7.85	\$8.27	\$8.72	\$9.18	\$9.67	\$10.18	\$10.72
Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]		
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
ALLETE, Inc.	ALE	66.00%	66.00%	66.00%	66.00%	65.94%	65.88%	65.82%	65.75%	65.69%	65.63%	65.57%	65.57%	65.57%	65.57%	65.57%		
Black Hills Corporation	BKH	59.00%	58.33%	57.67%	57.00%	58.22%	59.45%	60.67%	61.90%	63.12%	64.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
El Paso Electric Company	EE	61.00%	62.33%	63.67%	65.00%	65.08%	65.16%	65.24%	65.33%	65.41%	65.49%	65.57%	65.57%	65.57%	65.57%	65.57%		
Hawaiian Electric Industries, Inc.	HE	61.00%	61.33%	61.67%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Northwestern Corporation	NWE	65.00%	66.00%	67.00%	68.00%	67.65%	67.31%	66.96%	66.61%	66.26%	65.92%	65.57%	65.57%	65.57%	65.57%	65.57%		
OGE Energy Corp.	OGE	71.00%	71.00%	71.00%	71.00%	70.22%	69.45%	68.67%	67.90%	67.12%	66.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
PNM Resources, Inc.	PNM	50.00%	50.00%	50.00%	50.00%	52.22%	54.45%	56.67%	58.90%	61.12%	63.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
Pinnacle West Capital Corporation	PNW	62.00%	62.00%	62.00%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Projected Annual Cash Flows		[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal Value	
ALLETE, Inc.	ALE	\$2.32	\$2.46	\$2.61	\$2.76	\$2.93	\$3.10	\$3.27	\$3.45	\$3.64	\$3.84	\$4.04	\$4.25	\$4.48	\$4.72	\$4.97	\$160.37	
Black Hills Corporation	BKH	\$2.26	\$2.38	\$2.51	\$2.64	\$2.87	\$3.12	\$3.38	\$3.65	\$3.93	\$4.23	\$4.54	\$4.78	\$5.03	\$5.30	\$5.58	\$137.85	
El Paso Electric Company	EE	\$1.63	\$1.75	\$1.88	\$2.02	\$2.12	\$2.23	\$2.35	\$2.48	\$2.61	\$2.75	\$2.90	\$3.06	\$3.22	\$3.39	\$3.57	\$113.39	
Hawaiian Electric Industries, Inc.	HE	\$1.16	\$1.26	\$1.37	\$1.48	\$1.61	\$1.74	\$1.88	\$2.02	\$2.16	\$2.30	\$2.44	\$2.57	\$2.71	\$2.85	\$3.00	\$79.16	
Northwestern Corporation	NWE	\$2.29	\$2.38	\$2.48	\$2.58	\$2.64	\$2.70	\$2.78	\$2.88	\$2.99	\$3.12	\$3.27	\$3.44	\$3.62	\$3.82	\$4.02	\$125.26	
OGE Energy Corp.	OGE	\$1.53	\$1.62	\$1.72	\$1.82	\$1.91	\$2.00	\$2.09	\$2.19	\$2.28	\$2.38	\$2.48	\$2.61	\$2.75	\$2.89	\$3.05	\$80.20	
PNM Resources, Inc.	PNM	\$1.11	\$1.19	\$1.28	\$1.38	\$1.55	\$1.73	\$1.92	\$2.12	\$2.34	\$2.56	\$2.79	\$2.94	\$3.10	\$3.26	\$3.43	\$91.78	
Pinnacle West Capital Corporation	PNW	\$3.09	\$3.27	\$3.47	\$3.68	\$3.93	\$4.19	\$4.47	\$4.76	\$5.07	\$5.38	\$5.71	\$6.02	\$6.34	\$6.68	\$7.03	\$182.83	
Projected Annual Data Investor Cash Flows		[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
Company	Ticker	Initial Outflow	2/15/19	12/31/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	6/30/33
ALLETE, Inc.	ALE	(\$76.90)	\$0.00	\$2.03	\$2.39	\$2.61	\$2.76	\$2.93	\$3.10	\$3.27	\$3.45	\$3.64	\$3.84	\$4.04	\$4.25	\$4.48	\$4.72	\$165.34
Black Hills Corporation	BKH	(\$64.12)	\$0.00	\$1.98	\$2.34	\$2.51	\$2.64	\$2.87	\$3.12	\$3.38	\$3.65	\$3.93	\$4.23	\$4.54	\$4.78	\$5.03	\$5.30	\$143.44
El Paso Electric Company	EE	(\$54.34)	\$0.00	\$1.43	\$1.67	\$1.88	\$2.02	\$2.12	\$2.23	\$2.35	\$2.48	\$2.61	\$2.75	\$2.90	\$3.06	\$3.22	\$3.39	\$116.96
Hawaiian Electric Industries, Inc.	HE	(\$37.01)	\$0.00	\$1.02	\$1.21	\$1.37	\$1.48	\$1.61	\$1.74	\$1.88	\$2.02	\$2.16	\$2.30	\$2.44	\$2.57	\$2.71	\$2.85	\$82.17
Northwestern Corporation	NWE	(\$61.78)	\$0.00	\$2.00	\$2.32	\$2.48	\$2.58	\$2.64	\$2.70	\$2.78	\$2.88	\$2.99	\$3.12	\$3.27	\$3.44	\$3.62	\$3.82	\$129.28
OGE Energy Corp.	OGE	(\$39.18)	\$0.00	\$1.34	\$1.58	\$1.72	\$1.82	\$1.91	\$2.00	\$2.09	\$2.19	\$2.28	\$2.38	\$2.48	\$2.61	\$2.75	\$2.89	\$83.25
PNM Resources, Inc.	PNM	(\$41.40)	\$0.00	\$0.97	\$1.15	\$1.28	\$1.38	\$1.55	\$1.73	\$1.92	\$2.12	\$2.34	\$2.56	\$2.79	\$2.94	\$3.10	\$3.26	\$95.22
Pinnacle West Capital Corporation	PNW	(\$86.69)	\$0.00	\$2.70	\$3.18	\$3.47	\$3.68	\$3.93	\$4.19	\$4.47	\$4.76	\$5.07	\$5.38	\$5.71	\$6.02	\$6.34	\$6.68	\$189.86

Multi-Stage Growth Discounted Cash Flow Model  
 90 Day Average Stock Price  
 Low EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]				
Company	Ticker	Stock Price	EPS Growth Rate Estimates			Long-Term Value	Payout Ratio	Iterative Solution		Terminal P/E Ratio	Terminal PEG Ratio							
			Zacks	First Call	Line			Low Growth	Proof			IRR						
ALLETE, Inc.	ALE	\$76.90	NA	6.00%	3.50%	3.50%	5.32%	66.00%	66.00%	65.57%	\$0.00	8.02%	25.59	4.81				
Black Hills Corporation	BKH	\$64.12	4.70%	4.46%	6.50%	4.46%	5.32%	59.00%	57.00%	65.57%	\$0.00	9.00%	18.78	3.53				
El Paso Electric Company	EE	\$54.34	4.40%	5.10%	3.00%	3.00%	5.32%	61.00%	65.00%	65.57%	\$0.00	8.15%	24.43	4.59				
Hawaiian Electric Industries, Inc.	HE	\$37.01	6.40%	7.80%	3.50%	3.50%	5.32%	61.00%	62.00%	65.57%	\$0.00	8.23%	23.75	4.47				
Northwestern Corporation	NWE	\$61.78	2.80%	2.59%	2.50%	2.50%	5.32%	65.00%	68.00%	65.57%	\$0.00	8.67%	20.80	3.87				
OGE Energy Corp.	OGE	\$39.18	5.20%	NA	6.00%	5.20%	5.32%	71.00%	71.00%	65.57%	\$0.00	9.09%	18.32	3.44				
PNM Resources, Inc.	PNM	\$41.40	4.70%	4.10%	7.50%	4.10%	5.32%	50.00%	50.00%	65.57%	\$0.00	8.40%	22.41	4.21				
Pinnacle West Capital Corporation	PNW	\$86.69	4.60%	4.16%	6.00%	4.16%	5.32%	62.00%	62.00%	65.57%	\$0.00	8.85%	19.53	3.67				
											Including Flotation Costs							
											Mean	8.55%	21.68	8.68%				
											Max	9.09%		9.22%				
											Min	8.02%		8.15%				
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
ALLETE, Inc.	ALE	\$3.13	\$3.24	\$3.35	\$3.47	\$3.59	\$3.72	\$3.85	\$3.99	\$4.16	\$4.34	\$4.55	\$4.77	\$5.03	\$5.29	\$5.58	\$5.87	\$6.19
Black Hills Corporation	BKH	\$3.38	\$3.53	\$3.69	\$3.85	\$4.02	\$4.20	\$4.39	\$4.59	\$4.81	\$5.05	\$5.30	\$5.58	\$5.87	\$6.18	\$6.51	\$6.86	\$7.22
El Paso Electric Company	EE	\$2.42	\$2.49	\$2.57	\$2.64	\$2.72	\$2.81	\$2.89	\$2.99	\$3.10	\$3.23	\$3.38	\$3.54	\$3.73	\$3.93	\$4.14	\$4.36	\$4.59
Hawaiian Electric Industries, Inc.	HE	\$1.64	\$1.70	\$1.76	\$1.82	\$1.88	\$1.95	\$2.02	\$2.09	\$2.18	\$2.27	\$2.38	\$2.50	\$2.63	\$2.77	\$2.92	\$3.08	\$3.24
Northwestern Corporation	NWE	\$3.34	\$3.42	\$3.51	\$3.60	\$3.69	\$3.78	\$3.87	\$3.99	\$4.13	\$4.29	\$4.47	\$4.69	\$4.94	\$5.20	\$5.48	\$5.77	\$6.08
OGE Energy Corp.	OGE	\$1.92	\$2.02	\$2.12	\$2.24	\$2.35	\$2.47	\$2.60	\$2.74	\$2.88	\$3.03	\$3.19	\$3.36	\$3.54	\$3.73	\$3.93	\$4.14	\$4.36
PNM Resources, Inc.	PNM	\$1.92	\$2.00	\$2.08	\$2.17	\$2.25	\$2.35	\$2.44	\$2.55	\$2.66	\$2.79	\$2.93	\$3.08	\$3.24	\$3.41	\$3.59	\$3.78	\$3.98
Pinnacle West Capital Corporation	PNW	\$4.43	\$4.61	\$4.81	\$5.01	\$5.21	\$5.43	\$5.66	\$5.90	\$6.17	\$6.46	\$6.78	\$7.13	\$7.51	\$7.91	\$8.33	\$8.77	\$9.24
Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]		
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
ALLETE, Inc.	ALE	66.00%	66.00%	66.00%	66.00%	65.94%	65.88%	65.82%	65.75%	65.69%	65.63%	65.57%	65.57%	65.57%	65.57%	65.57%		
Black Hills Corporation	BKH	59.00%	58.33%	57.67%	57.00%	58.22%	59.45%	60.67%	61.90%	63.12%	64.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
El Paso Electric Company	EE	61.00%	62.33%	63.67%	65.00%	65.08%	65.16%	65.24%	65.33%	65.41%	65.49%	65.57%	65.57%	65.57%	65.57%	65.57%		
Hawaiian Electric Industries, Inc.	HE	61.00%	61.33%	61.67%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Northwestern Corporation	NWE	65.00%	66.00%	67.00%	68.00%	67.65%	67.31%	66.96%	66.61%	66.26%	65.92%	65.57%	65.57%	65.57%	65.57%	65.57%		
OGE Energy Corp.	OGE	71.00%	71.00%	71.00%	71.00%	70.22%	69.45%	68.67%	67.90%	67.12%	66.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
PNM Resources, Inc.	PNM	50.00%	50.00%	50.00%	50.00%	52.22%	54.45%	56.67%	58.90%	61.12%	63.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
Pinnacle West Capital Corporation	PNW	62.00%	62.00%	62.00%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Projected Annual Cash Flows		[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal Value	
ALLETE, Inc.	ALE	\$2.21	\$2.29	\$2.37	\$2.45	\$2.54	\$2.63	\$2.74	\$2.85	\$2.99	\$3.13	\$3.30	\$3.47	\$3.66	\$3.85	\$4.06	\$158.31	
Black Hills Corporation	BKH	\$2.18	\$2.25	\$2.32	\$2.40	\$2.56	\$2.73	\$2.92	\$3.12	\$3.35	\$3.59	\$3.85	\$4.05	\$4.27	\$4.50	\$4.74	\$135.63	
El Paso Electric Company	EE	\$1.57	\$1.65	\$1.73	\$1.82	\$1.88	\$1.95	\$2.02	\$2.11	\$2.21	\$2.32	\$2.45	\$2.58	\$2.71	\$2.86	\$3.01	\$112.11	
Hawaiian Electric Industries, Inc.	HE	\$1.07	\$1.12	\$1.16	\$1.21	\$1.26	\$1.32	\$1.38	\$1.46	\$1.54	\$1.63	\$1.73	\$1.82	\$1.92	\$2.02	\$2.13	\$76.97	
Northwestern Corporation	NWE	\$2.28	\$2.37	\$2.47	\$2.57	\$2.62	\$2.68	\$2.76	\$2.86	\$2.97	\$3.09	\$3.24	\$3.41	\$3.59	\$3.78	\$3.99	\$125.19	
OGE Energy Corp.	OGE	\$1.51	\$1.59	\$1.67	\$1.76	\$1.83	\$1.90	\$1.98	\$2.06	\$2.14	\$2.23	\$2.32	\$2.45	\$2.58	\$2.71	\$2.86	\$79.81	
PNM Resources, Inc.	PNM	\$1.04	\$1.08	\$1.13	\$1.17	\$1.28	\$1.39	\$1.51	\$1.64	\$1.79	\$1.95	\$2.12	\$2.24	\$2.36	\$2.48	\$2.61	\$89.31	
Pinnacle West Capital Corporation	PNW	\$2.98	\$3.10	\$3.23	\$3.37	\$3.54	\$3.72	\$3.92	\$4.14	\$4.38	\$4.64	\$4.92	\$5.19	\$5.46	\$5.75	\$6.06	\$180.48	
Projected Annual Data Investor Cash Flows		[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
Company	Ticker	Initial Outflow	2/15/19	12/31/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	6/30/33
ALLETE, Inc.	ALE	(\$76.90)	\$0.00	\$1.93	\$2.25	\$2.37	\$2.45	\$2.54	\$2.63	\$2.74	\$2.85	\$2.99	\$3.13	\$3.30	\$3.47	\$3.66	\$3.85	\$162.36
Black Hills Corporation	BKH	(\$64.12)	\$0.00	\$1.90	\$2.22	\$2.32	\$2.40	\$2.56	\$2.73	\$2.92	\$3.12	\$3.35	\$3.59	\$3.85	\$4.05	\$4.27	\$4.50	\$140.37
El Paso Electric Company	EE	(\$54.34)	\$0.00	\$1.37	\$1.59	\$1.73	\$1.82	\$1.88	\$1.95	\$2.02	\$2.11	\$2.21	\$2.32	\$2.45	\$2.58	\$2.71	\$2.86	\$115.12
Hawaiian Electric Industries, Inc.	HE	(\$37.01)	\$0.00	\$0.94	\$1.09	\$1.16	\$1.21	\$1.26	\$1.32	\$1.38	\$1.46	\$1.54	\$1.63	\$1.73	\$1.82	\$1.92	\$2.02	\$79.09
Northwestern Corporation	NWE	(\$61.78)	\$0.00	\$1.99	\$2.31	\$2.47	\$2.57	\$2.62	\$2.68	\$2.76	\$2.86	\$2.97	\$3.09	\$3.24	\$3.41	\$3.59	\$3.78	\$129.18
OGE Energy Corp.	OGE	(\$39.18)	\$0.00	\$1.32	\$1.55	\$1.67	\$1.76	\$1.83	\$1.90	\$1.98	\$2.06	\$2.14	\$2.23	\$2.32	\$2.45	\$2.58	\$2.71	\$82.66
PNM Resources, Inc.	PNM	(\$41.40)	\$0.00	\$0.91	\$1.06	\$1.13	\$1.17	\$1.28	\$1.39	\$1.51	\$1.64	\$1.79	\$1.95	\$2.12	\$2.24	\$2.36	\$2.48	\$91.93
Pinnacle West Capital Corporation	PNW	(\$86.69)	\$0.00	\$2.60	\$3.04	\$3.23	\$3.37	\$3.54	\$3.72	\$3.92	\$4.14	\$4.38	\$4.64	\$4.92	\$5.19	\$5.46	\$5.75	\$186.54

Multi-Stage Growth Discounted Cash Flow Model  
 180 Day Average Stock Price  
 Average EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]				
Company	Ticker	Stock Price	EPS Growth Rate Estimates			Long-Term Value	Growth	Payout Ratio			Iterative Solution		Terminal P/E Ratio	Terminal PEG Ratio				
			Zacks	First Call	Line			Average	2019	2022	2029	Proof			IRR			
ALLETE, Inc.	ALE	\$76.55	NA	6.00%	3.50%	4.75%	5.32%	66.00%	66.00%	65.57%	\$0.00	8.30%	23.15	4.35				
Black Hills Corporation	BKH	\$61.83	4.70%	4.46%	6.50%	5.22%	5.32%	59.00%	57.00%	65.57%	\$0.00	9.35%	17.12	3.22				
El Paso Electric Company	EE	\$57.24	4.40%	5.10%	3.00%	4.17%	5.32%	61.00%	65.00%	65.57%	\$0.00	8.25%	23.54	4.43				
Hawaiian Electric Industries, Inc.	HE	\$35.90	6.40%	7.80%	3.50%	5.90%	5.32%	61.00%	62.00%	65.57%	\$0.00	8.91%	19.24	3.62				
Northwestern Corporation	NWE	\$59.97	2.80%	2.59%	2.50%	2.56%	5.32%	65.00%	68.00%	65.57%	\$0.00	8.79%	19.87	3.74				
OGE Energy Corp.	OGE	\$37.55	5.20%	NA	6.00%	5.60%	5.32%	71.00%	71.00%	65.57%	\$0.00	9.38%	17.02	3.20				
PNM Resources, Inc.	PNM	\$40.10	4.70%	4.10%	7.50%	5.43%	5.32%	50.00%	50.00%	65.57%	\$0.00	8.82%	19.69	3.70				
Pinnacle West Capital Corporation	PNW	\$83.10	4.60%	4.16%	6.00%	4.92%	5.32%	62.00%	62.00%	65.57%	\$0.00	9.22%	17.69	3.33				
												Including Flotation Costs						
												Mean	8.88%	19.66	9.01%			
												Max	9.38%		9.51%			
												Min	8.25%		8.38%			
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
ALLETE, Inc.	ALE	\$3.13	\$3.28	\$3.43	\$3.60	\$3.77	\$3.95	\$4.13	\$4.34	\$4.55	\$4.78	\$5.02	\$5.29	\$5.57	\$5.86	\$6.17	\$6.50	\$6.85
Black Hills Corporation	BKH	\$3.38	\$3.56	\$3.74	\$3.94	\$4.14	\$4.36	\$4.59	\$4.83	\$5.08	\$5.35	\$5.63	\$5.93	\$6.24	\$6.58	\$6.93	\$7.29	\$7.68
El Paso Electric Company	EE	\$2.42	\$2.52	\$2.63	\$2.74	\$2.85	\$2.97	\$3.09	\$3.23	\$3.37	\$3.53	\$3.71	\$3.90	\$4.10	\$4.32	\$4.55	\$4.80	\$5.05
Hawaiian Electric Industries, Inc.	HE	\$1.64	\$1.74	\$1.84	\$1.95	\$2.06	\$2.18	\$2.31	\$2.45	\$2.59	\$2.73	\$2.88	\$3.04	\$3.20	\$3.37	\$3.55	\$3.74	\$3.94
Northwestern Corporation	NWE	\$3.34	\$3.43	\$3.51	\$3.60	\$3.70	\$3.79	\$3.89	\$4.01	\$4.14	\$4.31	\$4.50	\$4.72	\$4.97	\$5.23	\$5.51	\$5.80	\$6.11
OGE Energy Corp.	OGE	\$1.92	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.13	\$3.30	\$3.47	\$3.66	\$3.85	\$4.06	\$4.27	\$4.50
PNM Resources, Inc.	PNM	\$1.92	\$2.02	\$2.13	\$2.25	\$2.37	\$2.50	\$2.64	\$2.78	\$2.93	\$3.09	\$3.25	\$3.43	\$3.61	\$3.80	\$4.00	\$4.22	\$4.44
Pinnacle West Capital Corporation	PNW	\$4.43	\$4.65	\$4.88	\$5.12	\$5.37	\$5.63	\$5.91	\$6.20	\$6.52	\$6.85	\$7.21	\$7.59	\$7.99	\$8.41	\$8.86	\$9.33	\$9.83
Projected Annual Dividend Payout Ratio			[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
ALLETE, Inc.	ALE	66.00%	66.00%	66.00%	66.00%	65.94%	65.88%	65.82%	65.75%	65.69%	65.63%	65.57%	65.57%	65.57%	65.57%	65.57%		
Black Hills Corporation	BKH	59.00%	58.33%	57.67%	57.00%	58.22%	59.45%	60.67%	61.90%	63.12%	64.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
El Paso Electric Company	EE	61.00%	62.33%	63.67%	65.00%	65.08%	65.16%	65.24%	65.33%	65.41%	65.49%	65.57%	65.57%	65.57%	65.57%	65.57%		
Hawaiian Electric Industries, Inc.	HE	61.00%	61.33%	61.67%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Northwestern Corporation	NWE	65.00%	66.00%	67.00%	68.00%	67.65%	67.31%	66.96%	66.61%	66.26%	65.92%	65.57%	65.57%	65.57%	65.57%	65.57%		
OGE Energy Corp.	OGE	71.00%	71.00%	71.00%	71.00%	70.22%	69.45%	68.67%	67.90%	67.12%	66.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
PNM Resources, Inc.	PNM	50.00%	50.00%	50.00%	50.00%	52.22%	54.45%	56.67%	58.90%	61.12%	63.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
Pinnacle West Capital Corporation	PNW	62.00%	62.00%	62.00%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Projected Annual Cash Flows			[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal Value	
ALLETE, Inc.	ALE	\$2.27	\$2.37	\$2.49	\$2.61	\$2.73	\$2.86	\$2.99	\$3.14	\$3.30	\$3.47	\$3.65	\$3.84	\$4.05	\$4.26	\$4.49	\$158.54	
Black Hills Corporation	BKH	\$2.21	\$2.30	\$2.39	\$2.48	\$2.67	\$2.87	\$3.08	\$3.31	\$3.55	\$3.82	\$4.09	\$4.31	\$4.54	\$4.78	\$5.04	\$131.56	
El Paso Electric Company	EE	\$1.60	\$1.70	\$1.81	\$1.93	\$2.01	\$2.10	\$2.20	\$2.31	\$2.42	\$2.55	\$2.69	\$2.83	\$2.99	\$3.14	\$3.31	\$118.89	
Hawaiian Electric Industries, Inc.	HE	\$1.12	\$1.19	\$1.27	\$1.35	\$1.45	\$1.54	\$1.64	\$1.75	\$1.86	\$1.98	\$2.10	\$2.21	\$2.33	\$2.45	\$2.58	\$75.75	
Northwestern Corporation	NWE	\$2.28	\$2.38	\$2.48	\$2.58	\$2.63	\$2.70	\$2.78	\$2.87	\$2.98	\$3.11	\$3.26	\$3.43	\$3.61	\$3.80	\$4.01	\$121.43	
OGE Energy Corp.	OGE	\$1.52	\$1.61	\$1.70	\$1.79	\$1.87	\$1.95	\$2.04	\$2.12	\$2.21	\$2.30	\$2.40	\$2.53	\$2.66	\$2.80	\$2.95	\$76.57	
PNM Resources, Inc.	PNM	\$1.07	\$1.13	\$1.19	\$1.25	\$1.38	\$1.51	\$1.66	\$1.82	\$1.99	\$2.17	\$2.37	\$2.49	\$2.62	\$2.76	\$2.91	\$87.44	
Pinnacle West Capital Corporation	PNW	\$3.02	\$3.17	\$3.33	\$3.49	\$3.69	\$3.91	\$4.14	\$4.39	\$4.65	\$4.93	\$5.24	\$5.52	\$5.81	\$6.12	\$6.44	\$173.82	
Projected Annual Data Investor Cash Flows		[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
Company	Ticker	Initial Outflow	2/15/19	12/31/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	6/30/33
ALLETE, Inc.	ALE	(\$76.55)	\$0.00	\$1.98	\$2.32	\$2.49	\$2.61	\$2.73	\$2.86	\$2.99	\$3.14	\$3.30	\$3.47	\$3.65	\$3.84	\$4.05	\$4.26	\$163.03
Black Hills Corporation	BKH	(\$61.83)	\$0.00	\$1.93	\$2.27	\$2.39	\$2.48	\$2.67	\$2.87	\$3.08	\$3.31	\$3.55	\$3.82	\$4.09	\$4.31	\$4.54	\$4.78	\$136.60
El Paso Electric Company	EE	(\$57.24)	\$0.00	\$1.40	\$1.64	\$1.81	\$1.93	\$2.01	\$2.10	\$2.20	\$2.31	\$2.42	\$2.55	\$2.69	\$2.83	\$2.99	\$3.14	\$122.20
Hawaiian Electric Industries, Inc.	HE	(\$35.90)	\$0.00	\$0.98	\$1.16	\$1.27	\$1.35	\$1.45	\$1.54	\$1.64	\$1.75	\$1.86	\$1.98	\$2.10	\$2.21	\$2.33	\$2.45	\$78.33
Northwestern Corporation	NWE	(\$59.97)	\$0.00	\$2.00	\$2.31	\$2.48	\$2.58	\$2.63	\$2.70	\$2.78	\$2.87	\$2.98	\$3.11	\$3.26	\$3.43	\$3.61	\$3.80	\$125.44
OGE Energy Corp.	OGE	(\$37.55)	\$0.00	\$1.33	\$1.56	\$1.70	\$1.79	\$1.87	\$1.95	\$2.04	\$2.12	\$2.21	\$2.30	\$2.40	\$2.53	\$2.66	\$2.80	\$79.52
PNM Resources, Inc.	PNM	(\$40.10)	\$0.00	\$0.93	\$1.10	\$1.19	\$1.25	\$1.38	\$1.51	\$1.66	\$1.82	\$1.99	\$2.17	\$2.37	\$2.49	\$2.62	\$2.76	\$90.36
Pinnacle West Capital Corporation	PNW	(\$83.10)	\$0.00	\$2.64	\$3.10	\$3.33	\$3.49	\$3.69	\$3.91	\$4.14	\$4.39	\$4.65	\$4.93	\$5.24	\$5.52	\$5.81	\$6.12	\$180.26

Multi-Stage Growth Discounted Cash Flow Model  
 180 Day Average Stock Price  
 High EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]					
Company	Ticker	Stock Price	Zacks	EPS Growth Rate Estimates			Long-Term Growth	Payout Ratio			Iterative Solution		Terminal P/E Ratio	Terminal PEG Ratio					
				First Call	Line	High Growth		2019	2022	2029	Proof	IRR							
ALLETE, Inc.	ALE	\$76.55	NA	6.00%	3.50%	6.00%	5.32%	66.00%	66.00%	65.57%	\$0.00	8.59%	21.07	3.96					
Black Hills Corporation	BKH	\$61.83	4.70%	4.46%	6.50%	6.50%	5.32%	59.00%	57.00%	65.57%	\$0.00	9.74%	15.62	2.94					
El Paso Electric Company	EE	\$57.24	4.40%	5.10%	3.00%	5.10%	5.32%	61.00%	65.00%	65.57%	\$0.00	8.47%	21.94	4.12					
Hawaiian Electric Industries, Inc.	HE	\$35.90	6.40%	7.80%	3.50%	7.80%	5.32%	61.00%	62.00%	65.57%	\$0.00	9.44%	16.77	3.15					
Northwestern Corporation	NWE	\$59.97	2.80%	2.59%	2.50%	2.60%	5.32%	65.00%	68.00%	65.57%	\$0.00	8.80%	19.82	3.73					
OGE Energy Corp.	OGE	\$37.55	5.20%	NA	6.00%	6.00%	5.32%	71.00%	71.00%	65.57%	\$0.00	9.50%	16.52	3.11					
PNM Resources, Inc.	PNM	\$40.10	4.70%	4.10%	7.50%	7.50%	5.32%	50.00%	50.00%	65.57%	\$0.00	9.38%	17.00	3.20					
Pinnacle West Capital Corporation	PNW	\$83.10	4.60%	4.16%	6.00%	6.00%	5.32%	62.00%	62.00%	65.57%	\$0.00	9.54%	16.34	3.07					
											Mean	9.18%	18.13	9.31%					
											Max	9.74%		9.87%					
											Min	8.47%		8.60%					
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	
ALLETE, Inc.	ALE	\$3.13	\$3.32	\$3.52	\$3.73	\$3.95	\$4.19	\$4.44	\$4.70	\$4.97	\$5.25	\$5.55	\$5.85	\$6.16	\$6.49	\$6.83	\$7.19	\$7.58	
Black Hills Corporation	BKH	\$3.38	\$3.60	\$3.83	\$4.08	\$4.35	\$4.63	\$4.93	\$5.24	\$5.56	\$5.89	\$6.23	\$6.57	\$6.92	\$7.29	\$7.68	\$8.08	\$8.51	
El Paso Electric Company	EE	\$2.42	\$2.54	\$2.67	\$2.81	\$2.95	\$3.10	\$3.26	\$3.43	\$3.61	\$3.79	\$3.99	\$4.20	\$4.43	\$4.66	\$4.91	\$5.17	\$5.45	
Hawaiian Electric Industries, Inc.	HE	\$1.64	\$1.77	\$1.91	\$2.05	\$2.21	\$2.39	\$2.57	\$2.76	\$2.96	\$3.15	\$3.34	\$3.54	\$3.72	\$3.92	\$4.13	\$4.35	\$4.58	
Northwestern Corporation	NWE	\$3.34	\$3.43	\$3.52	\$3.61	\$3.70	\$3.80	\$3.90	\$4.02	\$4.16	\$4.32	\$4.51	\$4.73	\$4.98	\$5.25	\$5.53	\$5.82	\$6.13	
OGE Energy Corp.	OGE	\$1.92	\$2.04	\$2.16	\$2.29	\$2.42	\$2.57	\$2.72	\$2.88	\$3.05	\$3.22	\$3.40	\$3.59	\$3.78	\$3.98	\$4.19	\$4.41	\$4.65	
PNM Resources, Inc.	PNM	\$1.92	\$2.06	\$2.22	\$2.39	\$2.56	\$2.76	\$2.96	\$3.17	\$3.39	\$3.61	\$3.82	\$4.04	\$4.26	\$4.48	\$4.72	\$4.97	\$5.24	
Pinnacle West Capital Corporation	PNW	\$4.43	\$4.70	\$4.98	\$5.28	\$5.59	\$5.93	\$6.28	\$6.65	\$7.04	\$7.44	\$7.85	\$8.27	\$8.72	\$9.18	\$9.67	\$10.18	\$10.72	
Projected Annual Dividend Payout Ratio			[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]		
Company	Ticker		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
ALLETE, Inc.	ALE		66.00%	66.00%	66.00%	66.00%	65.94%	65.88%	65.82%	65.75%	65.69%	65.63%	65.57%	65.57%	65.57%	65.57%	65.57%		
Black Hills Corporation	BKH		59.00%	58.33%	57.67%	57.00%	58.22%	59.45%	60.67%	61.90%	63.12%	64.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
El Paso Electric Company	EE		61.00%	62.33%	63.67%	65.00%	65.08%	65.16%	65.24%	65.33%	65.41%	65.49%	65.57%	65.57%	65.57%	65.57%	65.57%		
Hawaiian Electric Industries, Inc.	HE		61.00%	61.33%	61.67%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Northwestern Corporation	NWE		65.00%	66.00%	67.00%	68.00%	67.65%	67.31%	66.96%	66.61%	66.26%	65.92%	65.57%	65.57%	65.57%	65.57%	65.57%		
OGE Energy Corp.	OGE		71.00%	71.00%	71.00%	71.00%	70.22%	69.45%	68.67%	67.90%	67.12%	66.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
PNM Resources, Inc.	PNM		50.00%	50.00%	50.00%	50.00%	52.22%	54.45%	56.67%	58.90%	61.12%	63.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
Pinnacle West Capital Corporation	PNW		62.00%	62.00%	62.00%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Projected Annual Cash Flows			[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	
Company	Ticker		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal Value	
ALLETE, Inc.	ALE		\$2.32	\$2.46	\$2.61	\$2.76	\$2.93	\$3.10	\$3.27	\$3.45	\$3.64	\$3.84	\$4.04	\$4.25	\$4.48	\$4.72	\$4.97	\$159.64	
Black Hills Corporation	BKH		\$2.26	\$2.38	\$2.51	\$2.64	\$2.87	\$3.12	\$3.38	\$3.65	\$3.93	\$4.23	\$4.54	\$4.78	\$5.03	\$5.30	\$5.58	\$133.00	
El Paso Electric Company	EE		\$1.63	\$1.75	\$1.88	\$2.02	\$2.12	\$2.23	\$2.35	\$2.48	\$2.61	\$2.75	\$2.90	\$3.06	\$3.22	\$3.39	\$3.57	\$119.49	
Hawaiian Electric Industries, Inc.	HE		\$1.16	\$1.26	\$1.37	\$1.48	\$1.61	\$1.74	\$1.88	\$2.02	\$2.16	\$2.30	\$2.44	\$2.57	\$2.71	\$2.85	\$3.00	\$76.83	
Northwestern Corporation	NWE		\$2.29	\$2.38	\$2.48	\$2.58	\$2.64	\$2.70	\$2.78	\$2.88	\$2.99	\$3.12	\$3.27	\$3.44	\$3.62	\$3.82	\$4.02	\$121.45	
OGE Energy Corp.	OGE		\$1.53	\$1.62	\$1.72	\$1.82	\$1.91	\$2.00	\$2.09	\$2.19	\$2.28	\$2.38	\$2.48	\$2.61	\$2.75	\$2.89	\$3.05	\$76.77	
PNM Resources, Inc.	PNM		\$1.11	\$1.19	\$1.28	\$1.38	\$1.55	\$1.73	\$1.92	\$2.12	\$2.34	\$2.56	\$2.79	\$2.94	\$3.10	\$3.26	\$3.43	\$89.02	
Pinnacle West Capital Corporation	PNW		\$3.09	\$3.27	\$3.47	\$3.68	\$3.93	\$4.19	\$4.47	\$4.76	\$5.07	\$5.38	\$5.71	\$6.02	\$6.34	\$6.68	\$7.03	\$175.24	
Projected Annual Data Investor Cash Flows			[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
Company	Ticker	Initial	Outflow	2/15/19	12/31/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	6/30/33
ALLETE, Inc.	ALE	(\$76.55)	\$0.00	\$2.03	\$2.39	\$2.61	\$2.76	\$2.93	\$3.10	\$3.27	\$3.45	\$3.64	\$3.84	\$4.04	\$4.25	\$4.48	\$4.72	\$4.97	\$164.61
Black Hills Corporation	BKH	(\$61.83)	\$0.00	\$1.98	\$2.34	\$2.51	\$2.64	\$2.87	\$3.12	\$3.38	\$3.65	\$3.93	\$4.23	\$4.54	\$4.78	\$5.03	\$5.30	\$138.58	
El Paso Electric Company	EE	(\$57.24)	\$0.00	\$1.43	\$1.67	\$1.88	\$2.02	\$2.12	\$2.23	\$2.35	\$2.48	\$2.61	\$2.75	\$2.90	\$3.06	\$3.22	\$3.39	\$123.07	
Hawaiian Electric Industries, Inc.	HE	(\$35.90)	\$0.00	\$1.02	\$1.21	\$1.37	\$1.48	\$1.61	\$1.74	\$1.88	\$2.02	\$2.16	\$2.30	\$2.44	\$2.57	\$2.71	\$2.85	\$79.83	
Northwestern Corporation	NWE	(\$59.97)	\$0.00	\$2.00	\$2.32	\$2.48	\$2.58	\$2.64	\$2.70	\$2.78	\$2.88	\$2.99	\$3.12	\$3.27	\$3.44	\$3.62	\$3.82	\$125.47	
OGE Energy Corp.	OGE	(\$37.55)	\$0.00	\$1.34	\$1.58	\$1.72	\$1.82	\$1.91	\$2.00	\$2.09	\$2.19	\$2.28	\$2.38	\$2.48	\$2.61	\$2.75	\$2.89	\$79.82	
PNM Resources, Inc.	PNM	(\$40.10)	\$0.00	\$0.97	\$1.15	\$1.28	\$1.38	\$1.55	\$1.73	\$1.92	\$2.12	\$2.34	\$2.56	\$2.79	\$2.94	\$3.10	\$3.26	\$92.46	
Pinnacle West Capital Corporation	PNW	(\$83.10)	\$0.00	\$2.70	\$3.18	\$3.47	\$3.68	\$3.93	\$4.19	\$4.47	\$4.76	\$5.07	\$5.38	\$5.71	\$6.02	\$6.34	\$6.68	\$182.27	



Multi-Stage Growth Discounted Cash Flow Model  
 180 Day Average Stock Price  
 Low EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]				
Company	Ticker	Stock Price	EPS Growth Rate Estimates			Long-Term Growth	Payout Ratio			Iterative Solution		Terminal P/E Ratio	Terminal PEG Ratio					
			Zacks	First Call	Line		Low Growth	2019	2022	2029	Proof			IRR				
ALLETE, Inc.	ALE	\$76.55	NA	6.00%	3.50%	3.50%	5.32%	66.00%	66.00%	65.57%	\$0.00	8.03%	25.48	4.79				
Black Hills Corporation	BKH	\$61.83	4.70%	4.46%	6.50%	4.46%	5.32%	59.00%	57.00%	65.57%	\$0.00	9.13%	18.10	3.40				
El Paso Electric Company	EE	\$57.24	4.40%	5.10%	3.00%	3.00%	5.32%	61.00%	65.00%	65.57%	\$0.00	8.00%	25.75	4.84				
Hawaiian Electric Industries, Inc.	HE	\$35.90	6.40%	7.80%	3.50%	3.50%	5.32%	61.00%	62.00%	65.57%	\$0.00	8.32%	23.03	4.33				
Northwestern Corporation	NWE	\$59.97	2.80%	2.59%	2.50%	2.50%	5.32%	65.00%	68.00%	65.57%	\$0.00	8.78%	19.97	3.76				
OGE Energy Corp.	OGE	\$37.55	5.20%	NA	6.00%	5.20%	5.32%	71.00%	71.00%	65.57%	\$0.00	9.26%	17.53	3.30				
PNM Resources, Inc.	PNM	\$40.10	4.70%	4.10%	7.50%	4.10%	5.32%	50.00%	50.00%	65.57%	\$0.00	8.50%	21.72	4.08				
Pinnacle West Capital Corporation	PNW	\$83.10	4.60%	4.16%	6.00%	4.16%	5.32%	62.00%	62.00%	65.57%	\$0.00	9.01%	18.71	3.52				
											Mean	8.63%	21.29	8.76%				
											Max	9.26%		9.39%				
											Min	8.00%		8.13%				
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
ALLETE, Inc.	ALE	\$3.13	\$3.24	\$3.35	\$3.47	\$3.59	\$3.72	\$3.85	\$3.99	\$4.16	\$4.34	\$4.55	\$4.77	\$5.03	\$5.29	\$5.58	\$5.87	\$6.19
Black Hills Corporation	BKH	\$3.38	\$3.53	\$3.69	\$3.85	\$4.02	\$4.20	\$4.39	\$4.59	\$4.81	\$5.05	\$5.30	\$5.58	\$5.87	\$6.18	\$6.51	\$6.86	\$7.22
El Paso Electric Company	EE	\$2.42	\$2.49	\$2.57	\$2.64	\$2.72	\$2.81	\$2.89	\$2.99	\$3.10	\$3.23	\$3.38	\$3.54	\$3.73	\$3.93	\$4.14	\$4.36	\$4.59
Hawaiian Electric Industries, Inc.	HE	\$1.64	\$1.70	\$1.76	\$1.82	\$1.88	\$1.95	\$2.02	\$2.09	\$2.18	\$2.27	\$2.38	\$2.50	\$2.63	\$2.77	\$2.92	\$3.08	\$3.24
Northwestern Corporation	NWE	\$3.34	\$3.42	\$3.51	\$3.60	\$3.69	\$3.78	\$3.87	\$3.99	\$4.13	\$4.29	\$4.47	\$4.69	\$4.94	\$5.20	\$5.48	\$5.77	\$6.08
OGE Energy Corp.	OGE	\$1.92	\$2.02	\$2.12	\$2.24	\$2.35	\$2.47	\$2.60	\$2.74	\$2.88	\$3.03	\$3.19	\$3.36	\$3.54	\$3.73	\$3.93	\$4.14	\$4.36
PNM Resources, Inc.	PNM	\$1.92	\$2.00	\$2.08	\$2.17	\$2.25	\$2.35	\$2.44	\$2.55	\$2.66	\$2.79	\$2.93	\$3.08	\$3.24	\$3.41	\$3.59	\$3.78	\$3.98
Pinnacle West Capital Corporation	PNW	\$4.43	\$4.61	\$4.81	\$5.01	\$5.21	\$5.43	\$5.66	\$5.90	\$6.17	\$6.46	\$6.78	\$7.13	\$7.51	\$7.91	\$8.33	\$8.77	\$9.24
Projected Annual Dividend Payout Ratio			[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	
Company	Ticker		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	
ALLETE, Inc.	ALE		66.00%	66.00%	66.00%	66.00%	65.94%	65.88%	65.82%	65.75%	65.69%	65.63%	65.57%	65.57%	65.57%	65.57%	65.57%	
Black Hills Corporation	BKH		59.00%	58.33%	57.67%	57.00%	58.22%	59.45%	60.67%	61.90%	63.12%	64.35%	65.57%	65.57%	65.57%	65.57%	65.57%	
El Paso Electric Company	EE		61.00%	62.33%	63.67%	65.00%	65.08%	65.16%	65.24%	65.33%	65.41%	65.49%	65.57%	65.57%	65.57%	65.57%	65.57%	
Hawaiian Electric Industries, Inc.	HE		61.00%	61.33%	61.67%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%	
Northwestern Corporation	NWE		65.00%	66.00%	67.00%	68.00%	67.65%	67.31%	66.96%	66.61%	66.26%	65.92%	65.57%	65.57%	65.57%	65.57%	65.57%	
OGE Energy Corp.	OGE		71.00%	71.00%	71.00%	71.00%	70.22%	69.45%	68.67%	67.90%	67.12%	66.35%	65.57%	65.57%	65.57%	65.57%	65.57%	
PNM Resources, Inc.	PNM		50.00%	50.00%	50.00%	50.00%	52.22%	54.45%	56.67%	58.90%	61.12%	63.35%	65.57%	65.57%	65.57%	65.57%	65.57%	
Pinnacle West Capital Corporation	PNW		62.00%	62.00%	62.00%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%	
Projected Annual Cash Flows			[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]
Company	Ticker		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal Value
ALLETE, Inc.	ALE		\$2.21	\$2.29	\$2.37	\$2.45	\$2.54	\$2.63	\$2.74	\$2.85	\$2.99	\$3.13	\$3.30	\$3.47	\$3.66	\$3.85	\$4.06	\$157.58
Black Hills Corporation	BKH		\$2.18	\$2.25	\$2.32	\$2.40	\$2.56	\$2.73	\$2.92	\$3.12	\$3.35	\$3.59	\$3.85	\$4.05	\$4.27	\$4.50	\$4.74	\$130.79
El Paso Electric Company	EE		\$1.57	\$1.65	\$1.73	\$1.82	\$1.88	\$1.95	\$2.02	\$2.11	\$2.21	\$2.32	\$2.45	\$2.58	\$2.71	\$2.86	\$3.01	\$118.21
Hawaiian Electric Industries, Inc.	HE		\$1.07	\$1.12	\$1.16	\$1.21	\$1.26	\$1.32	\$1.38	\$1.46	\$1.54	\$1.63	\$1.73	\$1.82	\$1.92	\$2.02	\$2.13	\$74.64
Northwestern Corporation	NWE		\$2.28	\$2.37	\$2.47	\$2.57	\$2.62	\$2.68	\$2.76	\$2.86	\$2.97	\$3.09	\$3.24	\$3.41	\$3.59	\$3.78	\$3.99	\$121.39
OGE Energy Corp.	OGE		\$1.51	\$1.59	\$1.67	\$1.76	\$1.83	\$1.90	\$1.98	\$2.06	\$2.14	\$2.23	\$2.32	\$2.45	\$2.58	\$2.71	\$2.86	\$76.38
PNM Resources, Inc.	PNM		\$1.04	\$1.08	\$1.13	\$1.17	\$1.28	\$1.39	\$1.51	\$1.64	\$1.79	\$1.95	\$2.12	\$2.24	\$2.36	\$2.48	\$2.61	\$86.56
Pinnacle West Capital Corporation	PNW		\$2.98	\$3.10	\$3.23	\$3.37	\$3.54	\$3.72	\$3.92	\$4.14	\$4.38	\$4.64	\$4.92	\$5.19	\$5.46	\$5.75	\$6.06	\$172.90
Projected Annual Data Investor Cash Flows		[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
Company	Ticker	Initial	2/15/19	12/31/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	6/30/33
ALLETE, Inc.	ALE	(\$76.55)	\$0.00	\$1.93	\$2.25	\$2.37	\$2.45	\$2.54	\$2.63	\$2.74	\$2.85	\$2.99	\$3.13	\$3.30	\$3.47	\$3.66	\$3.85	\$161.64
Black Hills Corporation	BKH	(\$61.83)	\$0.00	\$1.90	\$2.22	\$2.32	\$2.40	\$2.56	\$2.73	\$2.92	\$3.12	\$3.35	\$3.59	\$3.85	\$4.05	\$4.27	\$4.50	\$135.52
El Paso Electric Company	EE	(\$57.24)	\$0.00	\$1.37	\$1.59	\$1.73	\$1.82	\$1.88	\$1.95	\$2.02	\$2.11	\$2.21	\$2.32	\$2.45	\$2.58	\$2.71	\$2.86	\$121.22
Hawaiian Electric Industries, Inc.	HE	(\$35.90)	\$0.00	\$0.94	\$1.09	\$1.16	\$1.21	\$1.26	\$1.32	\$1.38	\$1.46	\$1.54	\$1.63	\$1.73	\$1.82	\$1.92	\$2.02	\$76.76
Northwestern Corporation	NWE	(\$59.97)	\$0.00	\$1.99	\$2.31	\$2.47	\$2.57	\$2.62	\$2.68	\$2.76	\$2.86	\$2.97	\$3.09	\$3.24	\$3.41	\$3.59	\$3.78	\$125.38
OGE Energy Corp.	OGE	(\$37.55)	\$0.00	\$1.32	\$1.55	\$1.67	\$1.76	\$1.83	\$1.90	\$1.98	\$2.06	\$2.14	\$2.23	\$2.32	\$2.45	\$2.58	\$2.71	\$79.23
PNM Resources, Inc.	PNM	(\$40.10)	\$0.00	\$0.91	\$1.06	\$1.13	\$1.17	\$1.28	\$1.39	\$1.51	\$1.64	\$1.79	\$1.95	\$2.12	\$2.24	\$2.36	\$2.48	\$89.18
Pinnacle West Capital Corporation	PNW	(\$83.10)	\$0.00	\$2.60	\$3.04	\$3.23	\$3.37	\$3.54	\$3.72	\$3.92	\$4.14	\$4.38	\$4.64	\$4.92	\$5.19	\$5.46	\$5.75	\$178.96

Multi-Stage Growth Discounted Cash Flow Model - Terminal P/E Ratio Equals 19.82  
 30 Day Average Stock Price  
 Average EPS Growth Rate Estimate in First Stage

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]							
	Stock	EPS Growth Rate Estimates				Long-Term	Payout Ratio			Iterative Solution		Terminal	Terminal							
Company	Ticker	Price	Zacks	First Call	Line	Average	Growth	2019	2022	2029	Proof	IRR	P/E Ratio	PEG Ratio						
ALLETE, Inc.	ALE	\$75.79	NA	6.00%	3.50%	4.75%	5.32%	66.00%	66.00%	65.57%	\$0.00	7.47%	19.82	3.73						
Black Hills Corporation	BKH	\$66.05	4.70%	4.46%	6.50%	5.22%	5.32%	59.00%	57.00%	65.57%	\$0.00	9.56%	19.82	3.73						
El Paso Electric Company	EE	\$51.25	4.40%	5.10%	3.00%	4.17%	5.32%	61.00%	65.00%	65.57%	\$0.00	8.25%	19.82	3.73						
Hawaiian Electric Industries, Inc.	HE	\$36.89	6.40%	7.80%	3.50%	5.90%	5.32%	61.00%	62.00%	65.57%	\$0.00	8.88%	19.82	3.73						
Northwestern Corporation	NWE	\$62.50	2.80%	2.59%	2.50%	2.56%	5.32%	65.00%	68.00%	65.57%	\$0.00	8.38%	19.82	3.73						
OGE Energy Corp.	OGE	\$40.48	5.20%	NA	6.00%	5.60%	5.32%	71.00%	71.00%	65.57%	\$0.00	9.51%	19.82	3.73						
PNM Resources, Inc.	PNM	\$41.99	4.70%	4.10%	7.50%	5.43%	5.32%	50.00%	50.00%	65.57%	\$0.00	8.44%	19.82	3.73						
Pinnacle West Capital Corporation	PNW	\$86.95	4.60%	4.16%	6.00%	4.92%	5.32%	62.00%	62.00%	65.57%	\$0.00	9.44%	19.82	3.73						
											Mean	8.74%	19.82	8.87%						
											Max	9.56%		9.69%						
											Min	7.47%		7.60%						
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]		
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
ALLETE, Inc.	ALE	\$3.13	\$3.28	\$3.43	\$3.60	\$3.77	\$3.95	\$4.13	\$4.34	\$4.55	\$4.78	\$5.02	\$5.29	\$5.57	\$5.86	\$6.17	\$6.50	\$6.85		
Black Hills Corporation	BKH	\$3.38	\$3.56	\$3.74	\$3.94	\$4.14	\$4.36	\$4.59	\$4.83	\$5.08	\$5.35	\$5.63	\$5.93	\$6.24	\$6.58	\$6.93	\$7.29	\$7.68		
El Paso Electric Company	EE	\$2.42	\$2.52	\$2.63	\$2.74	\$2.85	\$2.97	\$3.09	\$3.23	\$3.37	\$3.53	\$3.71	\$3.90	\$4.10	\$4.32	\$4.55	\$4.80	\$5.05		
Hawaiian Electric Industries, Inc.	HE	\$1.64	\$1.74	\$1.84	\$1.95	\$2.06	\$2.18	\$2.31	\$2.45	\$2.59	\$2.73	\$2.88	\$3.04	\$3.20	\$3.37	\$3.55	\$3.74	\$3.94		
Northwestern Corporation	NWE	\$3.34	\$3.43	\$3.51	\$3.60	\$3.70	\$3.79	\$3.89	\$4.01	\$4.14	\$4.31	\$4.50	\$4.72	\$4.97	\$5.23	\$5.51	\$5.80	\$6.11		
OGE Energy Corp.	OGE	\$1.92	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.13	\$3.30	\$3.47	\$3.66	\$3.85	\$4.06	\$4.27	\$4.50		
PNM Resources, Inc.	PNM	\$1.92	\$2.02	\$2.13	\$2.25	\$2.37	\$2.50	\$2.64	\$2.78	\$2.93	\$3.09	\$3.25	\$3.43	\$3.61	\$3.80	\$4.00	\$4.22	\$4.44		
Pinnacle West Capital Corporation	PNW	\$4.43	\$4.65	\$4.88	\$5.12	\$5.37	\$5.63	\$5.91	\$6.20	\$6.52	\$6.85	\$7.21	\$7.59	\$7.99	\$8.41	\$8.86	\$9.33	\$9.83		
Projected Annual Dividend Payout Ratio				[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]		
Company	Ticker			2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
ALLETE, Inc.	ALE			66.00%	66.00%	66.00%	66.00%	65.94%	65.88%	65.82%	65.75%	65.69%	65.63%	65.57%	65.57%	65.57%	65.57%	65.57%		
Black Hills Corporation	BKH			59.00%	58.33%	57.67%	57.00%	58.22%	59.45%	60.67%	61.90%	63.12%	64.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
El Paso Electric Company	EE			61.00%	62.33%	63.67%	65.00%	65.08%	65.16%	65.24%	65.33%	65.41%	65.49%	65.57%	65.57%	65.57%	65.57%	65.57%		
Hawaiian Electric Industries, Inc.	HE			61.00%	61.33%	61.67%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Northwestern Corporation	NWE			65.00%	66.00%	67.00%	68.00%	67.65%	67.31%	66.96%	66.61%	66.26%	65.92%	65.57%	65.57%	65.57%	65.57%	65.57%		
OGE Energy Corp.	OGE			71.00%	71.00%	71.00%	71.00%	70.22%	69.45%	68.67%	67.90%	67.12%	66.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
PNM Resources, Inc.	PNM			50.00%	50.00%	50.00%	50.00%	52.22%	54.45%	56.67%	58.90%	61.12%	63.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
Pinnacle West Capital Corporation	PNW			62.00%	62.00%	62.00%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Projected Annual Cash Flows				[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	
Company	Ticker			2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal Value	
ALLETE, Inc.	ALE			\$2.27	\$2.37	\$2.49	\$2.61	\$2.73	\$2.86	\$2.99	\$3.14	\$3.30	\$3.47	\$3.65	\$3.84	\$4.05	\$4.26	\$4.49	\$135.75	
Black Hills Corporation	BKH			\$2.21	\$2.30	\$2.39	\$2.48	\$2.67	\$2.87	\$3.08	\$3.31	\$3.55	\$3.82	\$4.09	\$4.31	\$4.54	\$4.78	\$5.04	\$152.27	
El Paso Electric Company	EE			\$1.60	\$1.70	\$1.81	\$1.93	\$2.01	\$2.10	\$2.20	\$2.31	\$2.42	\$2.55	\$2.69	\$2.83	\$2.99	\$3.14	\$3.31	\$100.09	
Hawaiian Electric Industries, Inc.	HE			\$1.12	\$1.19	\$1.27	\$1.35	\$1.45	\$1.54	\$1.64	\$1.75	\$1.86	\$1.98	\$2.10	\$2.21	\$2.33	\$2.45	\$2.58	\$78.04	
Northwestern Corporation	NWE			\$2.28	\$2.38	\$2.48	\$2.58	\$2.63	\$2.70	\$2.78	\$2.87	\$2.98	\$3.11	\$3.26	\$3.43	\$3.61	\$3.80	\$4.01	\$121.11	
OGE Energy Corp.	OGE			\$1.52	\$1.61	\$1.70	\$1.79	\$1.87	\$1.95	\$2.04	\$2.12	\$2.21	\$2.30	\$2.40	\$2.53	\$2.66	\$2.80	\$2.95	\$89.19	
PNM Resources, Inc.	PNM			\$1.07	\$1.13	\$1.19	\$1.25	\$1.38	\$1.51	\$1.66	\$1.82	\$1.99	\$2.17	\$2.37	\$2.49	\$2.62	\$2.76	\$2.91	\$88.00	
Pinnacle West Capital Corporation	PNW			\$3.02	\$3.17	\$3.33	\$3.49	\$3.69	\$3.91	\$4.14	\$4.39	\$4.65	\$4.93	\$5.24	\$5.52	\$5.81	\$6.12	\$6.44	\$194.79	
Projected Annual Data Investor Cash Flows				[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
Company	Ticker			Initial	2/15/19	12/31/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	6/30/33
ALLETE, Inc.	ALE			(\$75.79)	\$0.00	\$1.98	\$2.32	\$2.49	\$2.61	\$2.73	\$2.86	\$2.99	\$3.14	\$3.30	\$3.47	\$3.65	\$3.84	\$4.05	\$4.26	\$140.24
Black Hills Corporation	BKH			(\$66.04)	\$0.00	\$1.93	\$2.27	\$2.39	\$2.48	\$2.67	\$2.87	\$3.08	\$3.31	\$3.55	\$3.82	\$4.09	\$4.31	\$4.54	\$4.78	\$157.31
El Paso Electric Company	EE			(\$51.24)	\$0.00	\$1.40	\$1.64	\$1.81	\$1.93	\$2.01	\$2.10	\$2.20	\$2.31	\$2.42	\$2.55	\$2.69	\$2.83	\$2.99	\$3.14	\$103.40
Hawaiian Electric Industries, Inc.	HE			(\$36.69)	\$0.00	\$0.98	\$1.16	\$1.27	\$1.35	\$1.45	\$1.54	\$1.64	\$1.75	\$1.86	\$1.98	\$2.10	\$2.21	\$2.33	\$2.45	\$80.63
Northwestern Corporation	NWE			(\$62.50)	\$0.00	\$2.00	\$2.31	\$2.48	\$2.58	\$2.63	\$2.70	\$2.78	\$2.87	\$2.98	\$3.11	\$3.26	\$3.43	\$3.61	\$3.80	\$125.12
OGE Energy Corp.	OGE			(\$40.48)	\$0.00	\$1.33	\$1.56	\$1.70	\$1.79	\$1.87	\$1.95	\$2.04	\$2.12	\$2.21	\$2.30	\$2.40	\$2.53	\$2.66	\$2.80	\$92.14
PNM Resources, Inc.	PNM			(\$41.99)	\$0.00	\$0.93	\$1.10	\$1.19	\$1.25	\$1.38	\$1.51	\$1.66	\$1.82	\$1.99	\$2.17	\$2.37	\$2.49	\$2.62	\$2.76	\$90.91
Pinnacle West Capital Corporation	PNW			(\$86.95)	\$0.00	\$2.64	\$3.10	\$3.33	\$3.49	\$3.69	\$3.91	\$4.14	\$4.39	\$4.65	\$4.93	\$5.24	\$5.52	\$5.81	\$6.12	\$201.24

Multi-Stage Growth Discounted Cash Flow Model - Terminal P/E Ratio Equals 19.82  
 30 Day Average Stock Price  
 High EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]				
Company	Ticker	Stock Price	EPS Growth Rate Estimates			Long-Term Growth	Payout Ratio			Iterative Solution		Terminal P/E Ratio	Terminal PEG Ratio					
			Zacks	First Call	Line		High Growth	2019	2022	2029	Proof			IRR				
ALLETE, Inc.	ALE	\$75.79	NA	6.00%	3.50%	6.00%	5.32%	66.00%	66.00%	65.57%	\$0.00	8.33%	19.82	3.73				
Black Hills Corporation	BKH	\$66.05	4.70%	4.46%	6.50%	6.50%	5.32%	59.00%	57.00%	65.57%	\$0.00	10.46%	19.82	3.73				
El Paso Electric Company	EE	\$51.25	4.40%	5.10%	3.00%	5.10%	5.32%	61.00%	65.00%	65.57%	\$0.00	8.90%	19.82	3.73				
Hawaiian Electric Industries, Inc.	HE	\$36.89	6.40%	7.80%	3.50%	7.80%	5.32%	61.00%	62.00%	65.57%	\$0.00	10.19%	19.82	3.73				
Northwestern Corporation	NWE	\$62.50	2.80%	2.59%	2.50%	2.60%	5.32%	65.00%	68.00%	65.57%	\$0.00	8.41%	19.82	3.73				
OGE Energy Corp.	OGE	\$40.48	5.20%	NA	6.00%	6.00%	5.32%	71.00%	71.00%	65.57%	\$0.00	9.79%	19.82	3.73				
PNM Resources, Inc.	PNM	\$41.99	4.70%	4.10%	7.50%	7.50%	5.32%	50.00%	50.00%	65.57%	\$0.00	9.85%	19.82	3.73				
Pinnacle West Capital Corporation	PNW	\$86.95	4.60%	4.16%	6.00%	6.00%	5.32%	62.00%	62.00%	65.57%	\$0.00	10.20%	19.82	3.73				
											Mean	9.52%	19.82	9.65%				
											Max	10.46%		10.59%				
											Min	8.33%		8.46%				
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
ALLETE, Inc.	ALE	\$3.13	\$3.32	\$3.52	\$3.73	\$3.95	\$4.19	\$4.44	\$4.70	\$4.97	\$5.25	\$5.55	\$5.85	\$6.16	\$6.49	\$6.83	\$7.19	\$7.58
Black Hills Corporation	BKH	\$3.38	\$3.60	\$3.83	\$4.08	\$4.35	\$4.63	\$4.93	\$5.24	\$5.56	\$5.89	\$6.23	\$6.57	\$6.92	\$7.29	\$7.68	\$8.08	\$8.51
El Paso Electric Company	EE	\$2.42	\$2.54	\$2.67	\$2.81	\$2.95	\$3.10	\$3.26	\$3.43	\$3.61	\$3.79	\$3.99	\$4.20	\$4.43	\$4.66	\$4.91	\$5.17	\$5.45
Hawaiian Electric Industries, Inc.	HE	\$1.64	\$1.77	\$1.91	\$2.05	\$2.21	\$2.39	\$2.57	\$2.76	\$2.96	\$3.15	\$3.34	\$3.54	\$3.72	\$3.92	\$4.13	\$4.35	\$4.58
Northwestern Corporation	NWE	\$3.34	\$3.43	\$3.52	\$3.61	\$3.70	\$3.80	\$3.90	\$4.02	\$4.16	\$4.32	\$4.51	\$4.73	\$4.98	\$5.25	\$5.53	\$5.82	\$6.13
OGE Energy Corp.	OGE	\$1.92	\$2.04	\$2.16	\$2.29	\$2.42	\$2.57	\$2.72	\$2.88	\$3.05	\$3.22	\$3.40	\$3.59	\$3.78	\$3.98	\$4.19	\$4.41	\$4.65
PNM Resources, Inc.	PNM	\$1.92	\$2.06	\$2.22	\$2.39	\$2.56	\$2.76	\$2.96	\$3.17	\$3.39	\$3.61	\$3.82	\$4.04	\$4.26	\$4.48	\$4.72	\$4.97	\$5.24
Pinnacle West Capital Corporation	PNW	\$4.43	\$4.70	\$4.98	\$5.28	\$5.59	\$5.93	\$6.28	\$6.65	\$7.04	\$7.44	\$7.85	\$8.27	\$8.72	\$9.18	\$9.67	\$10.18	\$10.72
Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]		
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
ALLETE, Inc.	ALE	66.00%	66.00%	66.00%	66.00%	65.94%	65.88%	65.82%	65.75%	65.69%	65.63%	65.57%	65.57%	65.57%	65.57%	65.57%		
Black Hills Corporation	BKH	59.00%	58.33%	57.67%	57.00%	58.22%	59.45%	60.67%	61.90%	63.12%	64.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
El Paso Electric Company	EE	61.00%	62.33%	63.67%	65.00%	65.08%	65.16%	65.24%	65.33%	65.41%	65.49%	65.57%	65.57%	65.57%	65.57%	65.57%		
Hawaiian Electric Industries, Inc.	HE	61.00%	61.33%	61.67%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Northwestern Corporation	NWE	65.00%	66.00%	67.00%	68.00%	67.65%	67.31%	66.96%	66.61%	66.26%	65.92%	65.57%	65.57%	65.57%	65.57%	65.57%		
OGE Energy Corp.	OGE	71.00%	71.00%	71.00%	71.00%	70.22%	69.45%	68.67%	67.90%	67.12%	66.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
PNM Resources, Inc.	PNM	50.00%	50.00%	50.00%	50.00%	52.22%	54.45%	56.67%	58.90%	61.12%	63.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
Pinnacle West Capital Corporation	PNW	62.00%	62.00%	62.00%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Projected Annual Cash Flows		[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal Value	
ALLETE, Inc.	ALE	\$2.32	\$2.46	\$2.61	\$2.76	\$2.93	\$3.10	\$3.27	\$3.45	\$3.64	\$3.84	\$4.04	\$4.25	\$4.48	\$4.72	\$4.97	\$150.15	
Black Hills Corporation	BKH	\$2.26	\$2.38	\$2.51	\$2.64	\$2.87	\$3.12	\$3.38	\$3.65	\$3.93	\$4.23	\$4.54	\$4.78	\$5.03	\$5.30	\$5.58	\$168.77	
El Paso Electric Company	EE	\$1.63	\$1.75	\$1.88	\$2.02	\$2.12	\$2.23	\$2.35	\$2.48	\$2.61	\$2.75	\$2.90	\$3.06	\$3.22	\$3.39	\$3.57	\$107.97	
Hawaiian Electric Industries, Inc.	HE	\$1.16	\$1.26	\$1.37	\$1.48	\$1.61	\$1.74	\$1.88	\$2.02	\$2.16	\$2.30	\$2.44	\$2.57	\$2.71	\$2.85	\$3.00	\$90.80	
Northwestern Corporation	NWE	\$2.29	\$2.38	\$2.48	\$2.58	\$2.64	\$2.70	\$2.78	\$2.88	\$2.99	\$3.12	\$3.27	\$3.44	\$3.62	\$3.82	\$4.02	\$121.48	
OGE Energy Corp.	OGE	\$1.53	\$1.62	\$1.72	\$1.82	\$1.91	\$2.00	\$2.09	\$2.19	\$2.28	\$2.38	\$2.48	\$2.61	\$2.75	\$2.89	\$3.05	\$92.10	
PNM Resources, Inc.	PNM	\$1.11	\$1.19	\$1.28	\$1.38	\$1.55	\$1.73	\$1.92	\$2.12	\$2.34	\$2.56	\$2.79	\$2.94	\$3.10	\$3.26	\$3.43	\$103.81	
Pinnacle West Capital Corporation	PNW	\$3.09	\$3.27	\$3.47	\$3.68	\$3.93	\$4.19	\$4.47	\$4.76	\$5.07	\$5.38	\$5.71	\$6.02	\$6.34	\$6.68	\$7.03	\$212.51	
Projected Annual Data Investor Cash Flows		[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
Company	Ticker	Initial Outflow	2/15/19	12/31/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	6/30/33
ALLETE, Inc.	ALE	(\$75.79)	\$0.00	\$2.03	\$2.39	\$2.61	\$2.76	\$2.93	\$3.10	\$3.27	\$3.45	\$3.64	\$3.84	\$4.04	\$4.25	\$4.48	\$4.72	\$155.12
Black Hills Corporation	BKH	(\$66.04)	\$0.00	\$1.98	\$2.34	\$2.51	\$2.64	\$2.87	\$3.12	\$3.38	\$3.65	\$3.93	\$4.23	\$4.54	\$4.78	\$5.03	\$5.30	\$174.35
El Paso Electric Company	EE	(\$51.24)	\$0.00	\$1.43	\$1.67	\$1.88	\$2.02	\$2.12	\$2.23	\$2.35	\$2.48	\$2.61	\$2.75	\$2.90	\$3.06	\$3.22	\$3.39	\$111.54
Hawaiian Electric Industries, Inc.	HE	(\$36.69)	\$0.00	\$1.02	\$1.21	\$1.37	\$1.48	\$1.61	\$1.74	\$1.88	\$2.02	\$2.16	\$2.30	\$2.44	\$2.57	\$2.71	\$2.85	\$93.80
Northwestern Corporation	NWE	(\$62.50)	\$0.00	\$2.00	\$2.32	\$2.48	\$2.58	\$2.64	\$2.70	\$2.78	\$2.88	\$2.99	\$3.12	\$3.27	\$3.44	\$3.62	\$3.82	\$125.50
OGE Energy Corp.	OGE	(\$40.48)	\$0.00	\$1.34	\$1.58	\$1.72	\$1.82	\$1.91	\$2.00	\$2.09	\$2.19	\$2.28	\$2.38	\$2.48	\$2.61	\$2.75	\$2.89	\$95.15
PNM Resources, Inc.	PNM	(\$41.99)	\$0.00	\$0.97	\$1.15	\$1.28	\$1.38	\$1.55	\$1.73	\$1.92	\$2.12	\$2.34	\$2.56	\$2.79	\$2.94	\$3.10	\$3.26	\$107.24
Pinnacle West Capital Corporation	PNW	(\$86.95)	\$0.00	\$2.70	\$3.18	\$3.47	\$3.68	\$3.93	\$4.19	\$4.47	\$4.76	\$5.07	\$5.38	\$5.71	\$6.02	\$6.34	\$6.68	\$219.54

Multi-Stage Growth Discounted Cash Flow Model - Terminal P/E Ratio Equals 19.82  
 30 Day Average Stock Price  
 Low EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]					
Company	Ticker	Stock Price	EPS Growth Rate Estimates			Long-Term Growth	Payout Ratio			Iterative Solution		Terminal P/E Ratio	Terminal PEG Ratio						
			Zacks	First Call	Line		Low Growth	2019	2022	2029	Proof			IRR					
ALLETE, Inc.	ALE	\$75.79	NA	6.00%	3.50%	3.50%	5.32%	66.00%	66.00%	65.57%	\$0.00	6.62%	19.82	3.73					
Black Hills Corporation	BKH	\$66.05	4.70%	4.46%	6.50%	4.46%	5.32%	59.00%	57.00%	65.57%	\$0.00	9.03%	19.82	3.73					
El Paso Electric Company	EE	\$51.25	4.40%	5.10%	3.00%	3.00%	5.32%	61.00%	65.00%	65.57%	\$0.00	7.44%	19.82	3.73					
Hawaiian Electric Industries, Inc.	HE	\$36.89	6.40%	7.80%	3.50%	3.50%	5.32%	61.00%	62.00%	65.57%	\$0.00	7.23%	19.82	3.73					
Northwestern Corporation	NWE	\$62.50	2.80%	2.59%	2.50%	2.50%	5.32%	65.00%	68.00%	65.57%	\$0.00	8.34%	19.82	3.73					
OGE Energy Corp.	OGE	\$40.48	5.20%	NA	6.00%	5.20%	5.32%	71.00%	71.00%	65.57%	\$0.00	9.22%	19.82	3.73					
PNM Resources, Inc.	PNM	\$41.99	4.70%	4.10%	7.50%	4.10%	5.32%	50.00%	50.00%	65.57%	\$0.00	7.54%	19.82	3.73					
Pinnacle West Capital Corporation	PNW	\$86.95	4.60%	4.16%	6.00%	4.16%	5.32%	62.00%	62.00%	65.57%	\$0.00	8.91%	19.82	3.73					
											Mean	8.04%	19.82	8.17%					
											Max	9.22%		9.36%					
											Min	6.62%		6.75%					
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	
ALLETE, Inc.	ALE	\$3.13	\$3.24	\$3.35	\$3.47	\$3.59	\$3.72	\$3.85	\$3.99	\$4.16	\$4.34	\$4.55	\$4.77	\$5.03	\$5.29	\$5.58	\$5.87	\$6.19	
Black Hills Corporation	BKH	\$3.38	\$3.53	\$3.69	\$3.85	\$4.02	\$4.20	\$4.39	\$4.59	\$4.81	\$5.05	\$5.30	\$5.58	\$5.87	\$6.18	\$6.51	\$6.86	\$7.22	
El Paso Electric Company	EE	\$2.42	\$2.49	\$2.57	\$2.64	\$2.72	\$2.81	\$2.89	\$2.99	\$3.10	\$3.23	\$3.38	\$3.54	\$3.73	\$3.93	\$4.14	\$4.36	\$4.59	
Hawaiian Electric Industries, Inc.	HE	\$1.64	\$1.70	\$1.76	\$1.82	\$1.88	\$1.95	\$2.02	\$2.09	\$2.18	\$2.27	\$2.38	\$2.50	\$2.63	\$2.77	\$2.92	\$3.08	\$3.24	
Northwestern Corporation	NWE	\$3.34	\$3.42	\$3.51	\$3.60	\$3.69	\$3.78	\$3.87	\$3.99	\$4.13	\$4.29	\$4.47	\$4.69	\$4.94	\$5.20	\$5.48	\$5.77	\$6.08	
OGE Energy Corp.	OGE	\$1.92	\$2.02	\$2.12	\$2.24	\$2.35	\$2.47	\$2.60	\$2.74	\$2.88	\$3.03	\$3.19	\$3.36	\$3.54	\$3.73	\$3.93	\$4.14	\$4.36	
PNM Resources, Inc.	PNM	\$1.92	\$2.00	\$2.08	\$2.17	\$2.25	\$2.35	\$2.44	\$2.55	\$2.66	\$2.79	\$2.93	\$3.08	\$3.24	\$3.41	\$3.59	\$3.78	\$3.98	
Pinnacle West Capital Corporation	PNW	\$4.43	\$4.61	\$4.81	\$5.01	\$5.21	\$5.43	\$5.66	\$5.90	\$6.17	\$6.46	\$6.78	\$7.13	\$7.51	\$7.91	\$8.33	\$8.77	\$9.24	
Projected Annual Dividend Payout Ratio			[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]		
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033			
ALLETE, Inc.	ALE	66.00%	66.00%	66.00%	66.00%	65.94%	65.88%	65.82%	65.75%	65.69%	65.63%	65.57%	65.57%	65.57%	65.57%	65.57%			
Black Hills Corporation	BKH	59.00%	58.33%	57.67%	57.00%	58.22%	59.45%	60.67%	61.90%	63.12%	64.35%	65.57%	65.57%	65.57%	65.57%	65.57%			
El Paso Electric Company	EE	61.00%	62.33%	63.67%	65.00%	65.08%	65.16%	65.24%	65.33%	65.41%	65.49%	65.57%	65.57%	65.57%	65.57%	65.57%			
Hawaiian Electric Industries, Inc.	HE	61.00%	61.33%	61.67%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%			
Northwestern Corporation	NWE	65.00%	66.00%	67.00%	68.00%	67.65%	67.31%	66.96%	66.61%	66.26%	65.92%	65.57%	65.57%	65.57%	65.57%	65.57%			
OGE Energy Corp.	OGE	71.00%	71.00%	71.00%	71.00%	70.22%	69.45%	68.67%	67.90%	67.12%	66.35%	65.57%	65.57%	65.57%	65.57%	65.57%			
PNM Resources, Inc.	PNM	50.00%	50.00%	50.00%	50.00%	52.22%	54.45%	56.67%	58.90%	61.12%	63.35%	65.57%	65.57%	65.57%	65.57%	65.57%			
Pinnacle West Capital Corporation	PNW	62.00%	62.00%	62.00%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%			
Projected Annual Cash Flows			[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal Value		
ALLETE, Inc.	ALE	\$2.21	\$2.29	\$2.37	\$2.45	\$2.54	\$2.63	\$2.74	\$2.85	\$2.99	\$3.13	\$3.30	\$3.47	\$3.66	\$3.85	\$4.06	\$122.59		
Black Hills Corporation	BKH	\$2.18	\$2.25	\$2.32	\$2.40	\$2.56	\$2.73	\$2.92	\$3.12	\$3.35	\$3.59	\$3.85	\$4.05	\$4.27	\$4.50	\$4.74	\$143.18		
El Paso Electric Company	EE	\$1.57	\$1.65	\$1.73	\$1.82	\$1.88	\$1.95	\$2.02	\$2.11	\$2.21	\$2.32	\$2.45	\$2.58	\$2.71	\$2.86	\$3.01	\$90.97		
Hawaiian Electric Industries, Inc.	HE	\$1.07	\$1.12	\$1.16	\$1.21	\$1.26	\$1.32	\$1.38	\$1.46	\$1.54	\$1.63	\$1.73	\$1.82	\$1.92	\$2.02	\$2.13	\$64.23		
Northwestern Corporation	NWE	\$2.28	\$2.37	\$2.47	\$2.57	\$2.62	\$2.68	\$2.76	\$2.86	\$2.97	\$3.09	\$3.24	\$3.41	\$3.59	\$3.78	\$3.99	\$120.48		
OGE Energy Corp.	OGE	\$1.51	\$1.59	\$1.67	\$1.76	\$1.83	\$1.90	\$1.98	\$2.06	\$2.14	\$2.23	\$2.32	\$2.45	\$2.58	\$2.71	\$2.86	\$86.36		
PNM Resources, Inc.	PNM	\$1.04	\$1.08	\$1.13	\$1.17	\$1.28	\$1.39	\$1.51	\$1.64	\$1.79	\$1.95	\$2.12	\$2.24	\$2.36	\$2.48	\$2.61	\$78.98		
Pinnacle West Capital Corporation	PNW	\$2.98	\$3.10	\$3.23	\$3.37	\$3.54	\$3.72	\$3.92	\$4.14	\$4.38	\$4.64	\$4.92	\$5.19	\$5.46	\$5.75	\$6.06	\$183.13		
Projected Annual Data Investor Cash Flows			[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
Company	Ticker	Initial Outflow	2/15/19	12/31/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	6/30/33	
ALLETE, Inc.	ALE	(\$75.79)	\$0.00	\$1.93	\$2.25	\$2.37	\$2.45	\$2.54	\$2.63	\$2.74	\$2.85	\$2.99	\$3.13	\$3.30	\$3.47	\$3.66	\$3.85	\$126.65	
Black Hills Corporation	BKH	(\$66.04)	\$0.00	\$1.90	\$2.22	\$2.32	\$2.40	\$2.56	\$2.73	\$2.92	\$3.12	\$3.35	\$3.59	\$3.85	\$4.05	\$4.27	\$4.50	\$147.91	
El Paso Electric Company	EE	(\$51.24)	\$0.00	\$1.37	\$1.59	\$1.73	\$1.82	\$1.88	\$1.95	\$2.02	\$2.11	\$2.21	\$2.32	\$2.45	\$2.58	\$2.71	\$2.86	\$93.98	
Hawaiian Electric Industries, Inc.	HE	(\$36.69)	\$0.00	\$0.94	\$1.09	\$1.16	\$1.21	\$1.26	\$1.32	\$1.38	\$1.46	\$1.54	\$1.63	\$1.73	\$1.82	\$1.92	\$2.02	\$66.36	
Northwestern Corporation	NWE	(\$62.50)	\$0.00	\$1.99	\$2.31	\$2.47	\$2.57	\$2.62	\$2.68	\$2.76	\$2.86	\$2.97	\$3.09	\$3.24	\$3.41	\$3.59	\$3.78	\$124.47	
OGE Energy Corp.	OGE	(\$40.48)	\$0.00	\$1.32	\$1.55	\$1.67	\$1.76	\$1.83	\$1.90	\$1.98	\$2.06	\$2.14	\$2.23	\$2.32	\$2.45	\$2.58	\$2.71	\$89.22	
PNM Resources, Inc.	PNM	(\$41.99)	\$0.00	\$0.91	\$1.06	\$1.13	\$1.17	\$1.28	\$1.39	\$1.51	\$1.64	\$1.79	\$1.95	\$2.12	\$2.24	\$2.36	\$2.48	\$81.60	
Pinnacle West Capital Corporation	PNW	(\$86.95)	\$0.00	\$2.60	\$3.04	\$3.23	\$3.37	\$3.54	\$3.72	\$3.92	\$4.14	\$4.38	\$4.64	\$4.92	\$5.19	\$5.46	\$5.75	\$189.19	

Multi-Stage Growth Discounted Cash Flow Model - Terminal P/E Ratio Equals 19.82  
 90 Day Average Stock Price  
 Average EPS Growth Rate Estimate in First Stage

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]							
	Stock	EPS Growth Rate Estimates				Long-Term	Payout Ratio			Iterative Solution	Terminal	Terminal								
Company	Ticker	Price	Zacks	First Call	Line	Average	Growth	2019	2022	2029	Proof	IRR	P/E Ratio	PEG Ratio						
ALLETE, Inc.	ALE	\$76.90	NA	6.00%	3.50%	4.75%	5.32%	66.00%	66.00%	65.57%	\$0.00	7.34%	19.82	3.73						
Black Hills Corporation	BKH	\$64.12	4.70%	4.46%	6.50%	5.22%	5.32%	59.00%	57.00%	65.57%	\$0.00	9.85%	19.82	3.73						
El Paso Electric Company	EE	\$54.34	4.40%	5.10%	3.00%	4.17%	5.32%	61.00%	65.00%	65.57%	\$0.00	7.70%	19.82	3.73						
Hawaiian Electric Industries, Inc.	HE	\$37.01	6.40%	7.80%	3.50%	5.90%	5.32%	61.00%	62.00%	65.57%	\$0.00	8.80%	19.82	3.73						
Northwestern Corporation	NWE	\$61.78	2.80%	2.59%	2.50%	2.56%	5.32%	65.00%	68.00%	65.57%	\$0.00	8.49%	19.82	3.73						
OGE Energy Corp.	OGE	\$39.18	5.20%	NA	6.00%	5.60%	5.32%	71.00%	71.00%	65.57%	\$0.00	9.82%	19.82	3.73						
PNM Resources, Inc.	PNM	\$41.40	4.70%	4.10%	7.50%	5.43%	5.32%	50.00%	50.00%	65.57%	\$0.00	8.57%	19.82	3.73						
Pinnacle West Capital Corporation	PNW	\$86.69	4.60%	4.16%	6.00%	4.92%	5.32%	62.00%	62.00%	65.57%	\$0.00	9.47%	19.82	3.73						
											Mean	8.76%	19.82	8.89%						
											Max	9.85%		9.98%						
											Min	7.34%		7.47%						
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]		
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
ALLETE, Inc.	ALE	\$3.13	\$3.28	\$3.43	\$3.60	\$3.77	\$3.95	\$4.13	\$4.34	\$4.55	\$4.78	\$5.02	\$5.29	\$5.57	\$5.86	\$6.17	\$6.50	\$6.85		
Black Hills Corporation	BKH	\$3.38	\$3.56	\$3.74	\$3.94	\$4.14	\$4.36	\$4.59	\$4.83	\$5.08	\$5.35	\$5.63	\$5.93	\$6.24	\$6.58	\$6.93	\$7.29	\$7.68		
El Paso Electric Company	EE	\$2.42	\$2.52	\$2.63	\$2.74	\$2.85	\$2.97	\$3.09	\$3.23	\$3.37	\$3.53	\$3.71	\$3.90	\$4.10	\$4.32	\$4.55	\$4.80	\$5.05		
Hawaiian Electric Industries, Inc.	HE	\$1.64	\$1.74	\$1.84	\$1.95	\$2.06	\$2.18	\$2.31	\$2.45	\$2.59	\$2.73	\$2.88	\$3.04	\$3.20	\$3.37	\$3.55	\$3.74	\$3.94		
Northwestern Corporation	NWE	\$3.34	\$3.43	\$3.51	\$3.60	\$3.70	\$3.79	\$3.89	\$4.01	\$4.14	\$4.31	\$4.50	\$4.72	\$4.97	\$5.23	\$5.51	\$5.80	\$6.11		
OGE Energy Corp.	OGE	\$1.92	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.13	\$3.30	\$3.47	\$3.66	\$3.85	\$4.06	\$4.27	\$4.50		
PNM Resources, Inc.	PNM	\$1.92	\$2.02	\$2.13	\$2.25	\$2.37	\$2.50	\$2.64	\$2.78	\$2.93	\$3.09	\$3.25	\$3.43	\$3.61	\$3.80	\$4.00	\$4.22	\$4.44		
Pinnacle West Capital Corporation	PNW	\$4.43	\$4.65	\$4.88	\$5.12	\$5.37	\$5.63	\$5.91	\$6.20	\$6.52	\$6.85	\$7.21	\$7.59	\$7.99	\$8.41	\$8.86	\$9.33	\$9.83		
Projected Annual Dividend Payout Ratio				[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]		
Company	Ticker			2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
ALLETE, Inc.	ALE			66.00%	66.00%	66.00%	66.00%	65.94%	65.88%	65.82%	65.75%	65.69%	65.63%	65.57%	65.57%	65.57%	65.57%	65.57%		
Black Hills Corporation	BKH			59.00%	58.33%	57.67%	57.00%	58.22%	59.45%	60.67%	61.90%	63.12%	64.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
El Paso Electric Company	EE			61.00%	62.33%	63.67%	65.00%	65.08%	65.16%	65.24%	65.33%	65.41%	65.49%	65.57%	65.57%	65.57%	65.57%	65.57%		
Hawaiian Electric Industries, Inc.	HE			61.00%	61.33%	61.67%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Northwestern Corporation	NWE			65.00%	66.00%	67.00%	68.00%	67.65%	67.31%	66.96%	66.61%	66.26%	65.92%	65.57%	65.57%	65.57%	65.57%	65.57%		
OGE Energy Corp.	OGE			71.00%	71.00%	71.00%	71.00%	70.22%	69.45%	68.67%	67.90%	67.12%	66.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
PNM Resources, Inc.	PNM			50.00%	50.00%	50.00%	50.00%	52.22%	54.45%	56.67%	58.90%	61.12%	63.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
Pinnacle West Capital Corporation	PNW			62.00%	62.00%	62.00%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Projected Annual Cash Flows				[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	
Company	Ticker			2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal Value	
ALLETE, Inc.	ALE			\$2.27	\$2.37	\$2.49	\$2.61	\$2.73	\$2.86	\$2.99	\$3.14	\$3.30	\$3.47	\$3.65	\$3.84	\$4.05	\$4.26	\$4.49	\$135.75	
Black Hills Corporation	BKH			\$2.21	\$2.30	\$2.39	\$2.48	\$2.67	\$2.87	\$3.08	\$3.31	\$3.55	\$3.82	\$4.09	\$4.31	\$4.54	\$4.78	\$5.04	\$152.27	
El Paso Electric Company	EE			\$1.60	\$1.70	\$1.81	\$1.93	\$2.01	\$2.10	\$2.20	\$2.31	\$2.42	\$2.55	\$2.69	\$2.83	\$2.99	\$3.14	\$3.31	\$100.09	
Hawaiian Electric Industries, Inc.	HE			\$1.12	\$1.19	\$1.27	\$1.35	\$1.45	\$1.54	\$1.64	\$1.75	\$1.86	\$1.98	\$2.10	\$2.21	\$2.33	\$2.45	\$2.58	\$78.04	
Northwestern Corporation	NWE			\$2.28	\$2.38	\$2.48	\$2.58	\$2.63	\$2.70	\$2.78	\$2.87	\$2.98	\$3.11	\$3.26	\$3.43	\$3.61	\$3.80	\$4.01	\$121.11	
OGE Energy Corp.	OGE			\$1.52	\$1.61	\$1.70	\$1.79	\$1.87	\$1.95	\$2.04	\$2.12	\$2.21	\$2.30	\$2.40	\$2.53	\$2.66	\$2.80	\$2.95	\$89.19	
PNM Resources, Inc.	PNM			\$1.07	\$1.13	\$1.19	\$1.25	\$1.38	\$1.51	\$1.66	\$1.82	\$1.99	\$2.17	\$2.37	\$2.49	\$2.62	\$2.76	\$2.91	\$88.00	
Pinnacle West Capital Corporation	PNW			\$3.02	\$3.17	\$3.33	\$3.49	\$3.69	\$3.91	\$4.14	\$4.39	\$4.65	\$4.93	\$5.24	\$5.52	\$5.81	\$6.12	\$6.44	\$194.79	
Projected Annual Data Investor Cash Flows				[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
Company	Ticker			Initial	2/15/19	12/31/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	6/30/33
ALLETE, Inc.	ALE			(\$76.90)	\$0.00	\$1.98	\$2.32	\$2.49	\$2.61	\$2.73	\$2.86	\$2.99	\$3.14	\$3.30	\$3.47	\$3.65	\$3.84	\$4.05	\$4.26	\$140.24
Black Hills Corporation	BKH			(\$64.12)	\$0.00	\$1.93	\$2.27	\$2.39	\$2.48	\$2.67	\$2.87	\$3.08	\$3.31	\$3.55	\$3.82	\$4.09	\$4.31	\$4.54	\$4.78	\$157.31
El Paso Electric Company	EE			(\$54.34)	\$0.00	\$1.40	\$1.64	\$1.81	\$1.93	\$2.01	\$2.10	\$2.20	\$2.31	\$2.42	\$2.55	\$2.69	\$2.83	\$2.99	\$3.14	\$103.40
Hawaiian Electric Industries, Inc.	HE			(\$37.01)	\$0.00	\$0.98	\$1.16	\$1.27	\$1.35	\$1.45	\$1.54	\$1.64	\$1.75	\$1.86	\$1.98	\$2.10	\$2.21	\$2.33	\$2.45	\$80.63
Northwestern Corporation	NWE			(\$61.78)	\$0.00	\$2.00	\$2.31	\$2.48	\$2.58	\$2.63	\$2.70	\$2.78	\$2.87	\$2.98	\$3.11	\$3.26	\$3.43	\$3.61	\$3.80	\$125.12
OGE Energy Corp.	OGE			(\$39.18)	\$0.00	\$1.33	\$1.56	\$1.70	\$1.79	\$1.87	\$1.95	\$2.04	\$2.12	\$2.21	\$2.30	\$2.40	\$2.53	\$2.66	\$2.80	\$92.14
PNM Resources, Inc.	PNM			(\$41.40)	\$0.00	\$0.93	\$1.10	\$1.19	\$1.25	\$1.38	\$1.51	\$1.66	\$1.82	\$1.99	\$2.17	\$2.37	\$2.49	\$2.62	\$2.76	\$90.91
Pinnacle West Capital Corporation	PNW			(\$86.69)	\$0.00	\$2.64	\$3.10	\$3.33	\$3.49	\$3.69	\$3.91	\$4.14	\$4.39	\$4.65	\$4.93	\$5.24	\$5.52	\$5.81	\$6.12	\$201.24

Multi-Stage Growth Discounted Cash Flow Model - Terminal P/E Ratio Equals 19.82  
 90 Day Average Stock Price  
 High EPS Growth Rate Estimate in First Stage

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]							
Company	Ticker	Stock Price	EPS Growth Rate Estimates			Long-Term Growth	Payout Ratio			Iterative Solution		Terminal P/E Ratio	Terminal PEG Ratio							
			Zacks	First Call	Line		High Growth	2019	2022	2029	Proof			IRR						
ALLETE, Inc.	ALE	\$76.90	NA	6.00%	3.50%	6.00%	5.32%	66.00%	66.00%	65.57%	\$0.00	8.19%	19.82	3.73						
Black Hills Corporation	BKH	\$64.12	4.70%	4.46%	6.50%	6.50%	5.32%	59.00%	57.00%	65.57%	\$0.00	10.74%	19.82	3.73						
El Paso Electric Company	EE	\$54.34	4.40%	5.10%	3.00%	5.10%	5.32%	61.00%	65.00%	65.57%	\$0.00	8.35%	19.82	3.73						
Hawaiian Electric Industries, Inc.	HE	\$37.01	6.40%	7.80%	3.50%	7.80%	5.32%	61.00%	62.00%	65.57%	\$0.00	10.11%	19.82	3.73						
Northwestern Corporation	NWE	\$61.78	2.80%	2.59%	2.50%	2.60%	5.32%	65.00%	68.00%	65.57%	\$0.00	8.52%	19.82	3.73						
OGE Energy Corp.	OGE	\$39.18	5.20%	NA	6.00%	6.00%	5.32%	71.00%	71.00%	65.57%	\$0.00	10.11%	19.82	3.73						
PNM Resources, Inc.	PNM	\$41.40	4.70%	4.10%	7.50%	7.50%	5.32%	50.00%	50.00%	65.57%	\$0.00	9.98%	19.82	3.73						
Pinnacle West Capital Corporation	PNW	\$86.69	4.60%	4.16%	6.00%	6.00%	5.32%	62.00%	62.00%	65.57%	\$0.00	10.23%	19.82	3.73						
										Mean	9.53%	19.82		9.66%						
										Max	10.74%			10.87%						
										Min	8.19%			8.32%						
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]		
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
ALLETE, Inc.	ALE	\$3.13	\$3.32	\$3.52	\$3.73	\$3.95	\$4.19	\$4.44	\$4.70	\$4.97	\$5.25	\$5.55	\$5.85	\$6.16	\$6.49	\$6.83	\$7.19	\$7.58		
Black Hills Corporation	BKH	\$3.38	\$3.60	\$3.83	\$4.08	\$4.35	\$4.63	\$4.93	\$5.24	\$5.56	\$5.89	\$6.23	\$6.57	\$6.92	\$7.29	\$7.68	\$8.08	\$8.51		
El Paso Electric Company	EE	\$2.42	\$2.54	\$2.67	\$2.81	\$2.95	\$3.10	\$3.26	\$3.43	\$3.61	\$3.79	\$3.99	\$4.20	\$4.43	\$4.66	\$4.91	\$5.17	\$5.45		
Hawaiian Electric Industries, Inc.	HE	\$1.64	\$1.77	\$1.91	\$2.05	\$2.21	\$2.39	\$2.57	\$2.76	\$2.96	\$3.15	\$3.34	\$3.54	\$3.72	\$3.92	\$4.13	\$4.35	\$4.58		
Northwestern Corporation	NWE	\$3.34	\$3.43	\$3.52	\$3.61	\$3.70	\$3.80	\$3.90	\$4.02	\$4.16	\$4.32	\$4.51	\$4.73	\$4.98	\$5.25	\$5.53	\$5.82	\$6.13		
OGE Energy Corp.	OGE	\$1.92	\$2.04	\$2.16	\$2.29	\$2.42	\$2.57	\$2.72	\$2.88	\$3.05	\$3.22	\$3.40	\$3.59	\$3.78	\$3.98	\$4.19	\$4.41	\$4.65		
PNM Resources, Inc.	PNM	\$1.92	\$2.06	\$2.22	\$2.39	\$2.56	\$2.76	\$2.96	\$3.17	\$3.39	\$3.61	\$3.82	\$4.04	\$4.26	\$4.48	\$4.72	\$4.97	\$5.24		
Pinnacle West Capital Corporation	PNW	\$4.43	\$4.70	\$4.98	\$5.28	\$5.59	\$5.93	\$6.28	\$6.65	\$7.04	\$7.44	\$7.85	\$8.27	\$8.72	\$9.18	\$9.67	\$10.18	\$10.72		
Projected Annual Dividend Payout Ratio				[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]		
Company	Ticker			2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
ALLETE, Inc.	ALE			66.00%	66.00%	66.00%	66.00%	65.94%	65.88%	65.82%	65.75%	65.69%	65.63%	65.57%	65.57%	65.57%	65.57%	65.57%		
Black Hills Corporation	BKH			59.00%	58.33%	57.67%	57.00%	58.22%	59.45%	60.67%	61.90%	63.12%	64.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
El Paso Electric Company	EE			61.00%	62.33%	63.67%	65.00%	65.08%	65.16%	65.24%	65.33%	65.41%	65.49%	65.57%	65.57%	65.57%	65.57%	65.57%		
Hawaiian Electric Industries, Inc.	HE			61.00%	61.33%	61.67%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Northwestern Corporation	NWE			65.00%	66.00%	67.00%	68.00%	67.65%	67.31%	66.96%	66.61%	66.26%	65.92%	65.57%	65.57%	65.57%	65.57%	65.57%		
OGE Energy Corp.	OGE			71.00%	71.00%	71.00%	71.00%	70.22%	69.45%	68.67%	67.90%	67.12%	66.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
PNM Resources, Inc.	PNM			50.00%	50.00%	50.00%	50.00%	52.22%	54.45%	56.67%	58.90%	61.12%	63.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
Pinnacle West Capital Corporation	PNW			62.00%	62.00%	62.00%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Projected Annual Cash Flows				[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	
Company	Ticker			2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal Value	
ALLETE, Inc.	ALE			\$2.32	\$2.46	\$2.61	\$2.76	\$2.93	\$3.10	\$3.27	\$3.45	\$3.64	\$3.84	\$4.04	\$4.25	\$4.48	\$4.72	\$4.97	\$150.15	
Black Hills Corporation	BKH			\$2.26	\$2.38	\$2.51	\$2.64	\$2.87	\$3.12	\$3.38	\$3.65	\$3.93	\$4.23	\$4.54	\$4.78	\$5.03	\$5.30	\$5.58	\$168.77	
El Paso Electric Company	EE			\$1.63	\$1.75	\$1.88	\$2.02	\$2.12	\$2.23	\$2.35	\$2.48	\$2.61	\$2.75	\$2.90	\$3.06	\$3.22	\$3.39	\$3.57	\$107.97	
Hawaiian Electric Industries, Inc.	HE			\$1.16	\$1.26	\$1.37	\$1.48	\$1.61	\$1.74	\$1.88	\$2.02	\$2.16	\$2.30	\$2.44	\$2.57	\$2.71	\$2.85	\$3.00	\$90.80	
Northwestern Corporation	NWE			\$2.29	\$2.38	\$2.48	\$2.58	\$2.64	\$2.70	\$2.78	\$2.88	\$2.99	\$3.12	\$3.27	\$3.44	\$3.62	\$3.82	\$4.02	\$121.48	
OGE Energy Corp.	OGE			\$1.53	\$1.62	\$1.72	\$1.82	\$1.91	\$2.00	\$2.09	\$2.19	\$2.28	\$2.38	\$2.48	\$2.61	\$2.75	\$2.89	\$3.05	\$92.10	
PNM Resources, Inc.	PNM			\$1.11	\$1.19	\$1.28	\$1.38	\$1.55	\$1.73	\$1.92	\$2.12	\$2.34	\$2.56	\$2.79	\$2.94	\$3.10	\$3.26	\$3.43	\$103.81	
Pinnacle West Capital Corporation	PNW			\$3.09	\$3.27	\$3.47	\$3.68	\$3.93	\$4.19	\$4.47	\$4.76	\$5.07	\$5.38	\$5.71	\$6.02	\$6.34	\$6.68	\$7.03	\$212.51	
Projected Annual Data Investor Cash Flows				[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
Company	Ticker			Initial	2/15/19	12/31/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	6/30/33
ALLETE, Inc.	ALE	(\$76.90)	\$0.00	\$2.03	\$2.39	\$2.61	\$2.76	\$2.93	\$3.10	\$3.27	\$3.45	\$3.64	\$3.84	\$4.04	\$4.25	\$4.48	\$4.72	\$4.97	\$155.12	
Black Hills Corporation	BKH	(\$64.12)	\$0.00	\$1.98	\$2.34	\$2.51	\$2.64	\$2.87	\$3.12	\$3.38	\$3.65	\$3.93	\$4.23	\$4.54	\$4.78	\$5.03	\$5.30	\$5.58	\$174.35	
El Paso Electric Company	EE	(\$54.34)	\$0.00	\$1.43	\$1.67	\$1.88	\$2.02	\$2.12	\$2.23	\$2.35	\$2.48	\$2.61	\$2.75	\$2.90	\$3.06	\$3.22	\$3.39	\$3.57	\$111.54	
Hawaiian Electric Industries, Inc.	HE	(\$37.01)	\$0.00	\$1.02	\$1.21	\$1.37	\$1.48	\$1.61	\$1.74	\$1.88	\$2.02	\$2.16	\$2.30	\$2.44	\$2.57	\$2.71	\$2.85	\$3.00	\$93.80	
Northwestern Corporation	NWE	(\$61.78)	\$0.00	\$2.00	\$2.32	\$2.48	\$2.58	\$2.64	\$2.70	\$2.78	\$2.88	\$2.99	\$3.12	\$3.27	\$3.44	\$3.62	\$3.82	\$4.02	\$125.50	
OGE Energy Corp.	OGE	(\$39.18)	\$0.00	\$1.34	\$1.58	\$1.72	\$1.82	\$1.91	\$2.00	\$2.09	\$2.19	\$2.28	\$2.38	\$2.48	\$2.61	\$2.75	\$2.89	\$3.05	\$95.15	
PNM Resources, Inc.	PNM	(\$41.40)	\$0.00	\$0.97	\$1.15	\$1.28	\$1.38	\$1.55	\$1.73	\$1.92	\$2.12	\$2.34	\$2.56	\$2.79	\$2.94	\$3.10	\$3.26	\$3.43	\$107.24	
Pinnacle West Capital Corporation	PNW	(\$86.69)	\$0.00	\$2.70	\$3.18	\$3.47	\$3.68	\$3.93	\$4.19	\$4.47	\$4.76	\$5.07	\$5.38	\$5.71	\$6.02	\$6.34	\$6.68	\$7.03	\$219.54	

Multi-Stage Growth Discounted Cash Flow Model - Terminal P/E Ratio Equals 19.82  
 90 Day Average Stock Price  
 Low EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]				
Company	Ticker	Stock Price	EPS Growth Rate Estimates			Long-Term Growth	Payout Ratio			Iterative Solution		Terminal P/E Ratio	Terminal PEG Ratio					
			Zacks	First Call	Line		Low Growth	2019	2022	2029	Proof			IRR				
ALLETE, Inc.	ALE	\$76.90	NA	6.00%	3.50%	3.50%	5.32%	66.00%	66.00%	65.57%	\$0.00	6.49%	19.82	3.73				
Black Hills Corporation	BKH	\$64.12	4.70%	4.46%	6.50%	4.46%	5.32%	59.00%	57.00%	65.57%	\$0.00	9.31%	19.82	3.73				
El Paso Electric Company	EE	\$54.34	4.40%	5.10%	3.00%	3.00%	5.32%	61.00%	65.00%	65.57%	\$0.00	6.90%	19.82	3.73				
Hawaiian Electric Industries, Inc.	HE	\$37.01	6.40%	7.80%	3.50%	3.50%	5.32%	61.00%	62.00%	65.57%	\$0.00	7.15%	19.82	3.73				
Northwestern Corporation	NWE	\$61.78	2.80%	2.59%	2.50%	2.50%	5.32%	65.00%	68.00%	65.57%	\$0.00	8.45%	19.82	3.73				
OGE Energy Corp.	OGE	\$39.18	5.20%	NA	6.00%	5.20%	5.32%	71.00%	71.00%	65.57%	\$0.00	9.54%	19.82	3.73				
PNM Resources, Inc.	PNM	\$41.40	4.70%	4.10%	7.50%	4.10%	5.32%	50.00%	50.00%	65.57%	\$0.00	7.66%	19.82	3.73				
Pinnacle West Capital Corporation	PNW	\$86.69	4.60%	4.16%	6.00%	4.16%	5.32%	62.00%	62.00%	65.57%	\$0.00	8.94%	19.82	3.73				
											Mean	8.06%	19.82	8.19%				
											Max	9.54%		9.67%				
											Min	6.49%		6.62%				
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
ALLETE, Inc.	ALE	\$3.13	\$3.24	\$3.35	\$3.47	\$3.59	\$3.72	\$3.85	\$3.99	\$4.16	\$4.34	\$4.55	\$4.77	\$5.03	\$5.29	\$5.58	\$5.87	\$6.19
Black Hills Corporation	BKH	\$3.38	\$3.53	\$3.69	\$3.85	\$4.02	\$4.20	\$4.39	\$4.59	\$4.81	\$5.05	\$5.30	\$5.58	\$5.87	\$6.18	\$6.51	\$6.86	\$7.22
El Paso Electric Company	EE	\$2.42	\$2.49	\$2.57	\$2.64	\$2.72	\$2.81	\$2.89	\$2.99	\$3.10	\$3.23	\$3.38	\$3.54	\$3.73	\$3.93	\$4.14	\$4.36	\$4.59
Hawaiian Electric Industries, Inc.	HE	\$1.64	\$1.70	\$1.76	\$1.82	\$1.88	\$1.95	\$2.02	\$2.09	\$2.18	\$2.27	\$2.38	\$2.50	\$2.63	\$2.77	\$2.92	\$3.08	\$3.24
Northwestern Corporation	NWE	\$3.34	\$3.42	\$3.51	\$3.60	\$3.69	\$3.78	\$3.87	\$3.99	\$4.13	\$4.29	\$4.47	\$4.69	\$4.94	\$5.20	\$5.48	\$5.77	\$6.08
OGE Energy Corp.	OGE	\$1.92	\$2.02	\$2.12	\$2.24	\$2.35	\$2.47	\$2.60	\$2.74	\$2.88	\$3.03	\$3.19	\$3.36	\$3.54	\$3.73	\$3.93	\$4.14	\$4.36
PNM Resources, Inc.	PNM	\$1.92	\$2.00	\$2.08	\$2.17	\$2.25	\$2.35	\$2.44	\$2.55	\$2.66	\$2.79	\$2.93	\$3.08	\$3.24	\$3.41	\$3.59	\$3.78	\$3.98
Pinnacle West Capital Corporation	PNW	\$4.43	\$4.61	\$4.81	\$5.01	\$5.21	\$5.43	\$5.66	\$5.90	\$6.17	\$6.46	\$6.78	\$7.13	\$7.51	\$7.91	\$8.33	\$8.77	\$9.24
Projected Annual Dividend Payout Ratio		[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]		
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
ALLETE, Inc.	ALE	66.00%	66.00%	66.00%	66.00%	65.94%	65.88%	65.82%	65.75%	65.69%	65.63%	65.57%	65.57%	65.57%	65.57%	65.57%		
Black Hills Corporation	BKH	59.00%	58.33%	57.67%	57.00%	58.22%	59.45%	60.67%	61.90%	63.12%	64.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
El Paso Electric Company	EE	61.00%	62.33%	63.67%	65.00%	65.08%	65.16%	65.24%	65.33%	65.41%	65.49%	65.57%	65.57%	65.57%	65.57%	65.57%		
Hawaiian Electric Industries, Inc.	HE	61.00%	61.33%	61.67%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Northwestern Corporation	NWE	65.00%	66.00%	67.00%	68.00%	67.65%	67.31%	66.96%	66.61%	66.26%	65.92%	65.57%	65.57%	65.57%	65.57%	65.57%		
OGE Energy Corp.	OGE	71.00%	71.00%	71.00%	71.00%	70.22%	69.45%	68.67%	67.90%	67.12%	66.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
PNM Resources, Inc.	PNM	50.00%	50.00%	50.00%	50.00%	52.22%	54.45%	56.67%	58.90%	61.12%	63.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
Pinnacle West Capital Corporation	PNW	62.00%	62.00%	62.00%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Projected Annual Cash Flows		[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal Value	
ALLETE, Inc.	ALE	\$2.21	\$2.29	\$2.37	\$2.45	\$2.54	\$2.63	\$2.74	\$2.85	\$2.99	\$3.13	\$3.30	\$3.47	\$3.66	\$3.85	\$4.06	\$122.59	
Black Hills Corporation	BKH	\$2.18	\$2.25	\$2.32	\$2.40	\$2.56	\$2.73	\$2.92	\$3.12	\$3.35	\$3.59	\$3.85	\$4.05	\$4.27	\$4.50	\$4.74	\$143.18	
El Paso Electric Company	EE	\$1.57	\$1.65	\$1.73	\$1.82	\$1.88	\$1.95	\$2.02	\$2.11	\$2.21	\$2.32	\$2.45	\$2.58	\$2.71	\$2.86	\$3.01	\$90.97	
Hawaiian Electric Industries, Inc.	HE	\$1.07	\$1.12	\$1.16	\$1.21	\$1.26	\$1.32	\$1.38	\$1.46	\$1.54	\$1.63	\$1.73	\$1.82	\$1.92	\$2.02	\$2.13	\$64.23	
Northwestern Corporation	NWE	\$2.28	\$2.37	\$2.47	\$2.57	\$2.62	\$2.68	\$2.76	\$2.86	\$2.97	\$3.09	\$3.24	\$3.41	\$3.59	\$3.78	\$3.99	\$120.48	
OGE Energy Corp.	OGE	\$1.51	\$1.59	\$1.67	\$1.76	\$1.83	\$1.90	\$1.98	\$2.06	\$2.14	\$2.23	\$2.32	\$2.45	\$2.58	\$2.71	\$2.86	\$86.36	
PNM Resources, Inc.	PNM	\$1.04	\$1.08	\$1.13	\$1.17	\$1.28	\$1.39	\$1.51	\$1.64	\$1.79	\$1.95	\$2.12	\$2.24	\$2.36	\$2.48	\$2.61	\$78.98	
Pinnacle West Capital Corporation	PNW	\$2.98	\$3.10	\$3.23	\$3.37	\$3.54	\$3.72	\$3.92	\$4.14	\$4.38	\$4.64	\$4.92	\$5.19	\$5.46	\$5.75	\$6.06	\$183.13	
Projected Annual Data Investor Cash Flows		[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
Company	Ticker	Initial Outflow	2/15/19	12/31/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	6/30/33
ALLETE, Inc.	ALE	(\$76.90)	\$0.00	\$1.93	\$2.25	\$2.37	\$2.45	\$2.54	\$2.63	\$2.74	\$2.85	\$2.99	\$3.13	\$3.30	\$3.47	\$3.66	\$3.85	\$126.65
Black Hills Corporation	BKH	(\$64.12)	\$0.00	\$1.90	\$2.22	\$2.32	\$2.40	\$2.56	\$2.73	\$2.92	\$3.12	\$3.35	\$3.59	\$3.85	\$4.05	\$4.27	\$4.50	\$147.91
El Paso Electric Company	EE	(\$54.34)	\$0.00	\$1.37	\$1.59	\$1.73	\$1.82	\$1.88	\$1.95	\$2.02	\$2.11	\$2.21	\$2.32	\$2.45	\$2.58	\$2.71	\$2.86	\$93.98
Hawaiian Electric Industries, Inc.	HE	(\$37.01)	\$0.00	\$0.94	\$1.09	\$1.16	\$1.21	\$1.26	\$1.32	\$1.38	\$1.46	\$1.54	\$1.63	\$1.73	\$1.82	\$1.92	\$2.02	\$66.36
Northwestern Corporation	NWE	(\$61.78)	\$0.00	\$1.99	\$2.31	\$2.47	\$2.57	\$2.62	\$2.68	\$2.76	\$2.86	\$2.97	\$3.09	\$3.24	\$3.41	\$3.59	\$3.78	\$124.47
OGE Energy Corp.	OGE	(\$39.18)	\$0.00	\$1.32	\$1.55	\$1.67	\$1.76	\$1.83	\$1.90	\$1.98	\$2.06	\$2.14	\$2.23	\$2.32	\$2.45	\$2.58	\$2.71	\$89.22
PNM Resources, Inc.	PNM	(\$41.40)	\$0.00	\$0.91	\$1.06	\$1.13	\$1.17	\$1.28	\$1.39	\$1.51	\$1.64	\$1.79	\$1.95	\$2.12	\$2.24	\$2.36	\$2.48	\$81.60
Pinnacle West Capital Corporation	PNW	(\$86.69)	\$0.00	\$2.60	\$3.04	\$3.23	\$3.37	\$3.54	\$3.72	\$3.92	\$4.14	\$4.38	\$4.64	\$4.92	\$5.19	\$5.46	\$5.75	\$189.19

Multi-Stage Growth Discounted Cash Flow Model - Terminal P/E Ratio Equals 19.82  
 180 Day Average Stock Price  
 Average EPS Growth Rate Estimate in First Stage

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]							
	Stock	EPS Growth Rate Estimates				Long-Term	Payout Ratio			Iterative Solution		Terminal	Terminal							
Company	Ticker	Price	Zacks	First Call	Line	Average	Growth	2019	2022	2029	Proof	IRR	P/E Ratio	PEG Ratio						
ALLETE, Inc.	ALE	\$76.55	NA	6.00%	3.50%	4.75%	5.32%	66.00%	66.00%	65.57%	\$0.00	7.38%	19.82	3.73						
Black Hills Corporation	BKH	\$61.83	4.70%	4.46%	6.50%	5.22%	5.32%	59.00%	57.00%	65.57%	\$0.00	10.19%	19.82	3.73						
El Paso Electric Company	EE	\$57.24	4.40%	5.10%	3.00%	4.17%	5.32%	61.00%	65.00%	65.57%	\$0.00	7.23%	19.82	3.73						
Hawaiian Electric Industries, Inc.	HE	\$35.90	6.40%	7.80%	3.50%	5.90%	5.32%	61.00%	62.00%	65.57%	\$0.00	9.08%	19.82	3.73						
Northwestern Corporation	NWE	\$59.97	2.80%	2.59%	2.50%	2.56%	5.32%	65.00%	68.00%	65.57%	\$0.00	8.78%	19.82	3.73						
OGE Energy Corp.	OGE	\$37.55	5.20%	NA	6.00%	5.60%	5.32%	71.00%	71.00%	65.57%	\$0.00	10.24%	19.82	3.73						
PNM Resources, Inc.	PNM	\$40.10	4.70%	4.10%	7.50%	5.43%	5.32%	50.00%	50.00%	65.57%	\$0.00	8.86%	19.82	3.73						
Pinnacle West Capital Corporation	PNW	\$83.10	4.60%	4.16%	6.00%	4.92%	5.32%	62.00%	62.00%	65.57%	\$0.00	9.88%	19.82	3.73						
											Mean	8.96%	19.82		9.09%					
											Max	10.24%			10.37%					
											Min	7.23%			7.36%					
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]		
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
ALLETE, Inc.	ALE	\$3.13	\$3.28	\$3.43	\$3.60	\$3.77	\$3.95	\$4.13	\$4.34	\$4.55	\$4.78	\$5.02	\$5.29	\$5.57	\$5.86	\$6.17	\$6.50	\$6.85		
Black Hills Corporation	BKH	\$3.38	\$3.56	\$3.74	\$3.94	\$4.14	\$4.36	\$4.59	\$4.83	\$5.08	\$5.35	\$5.63	\$5.93	\$6.24	\$6.58	\$6.93	\$7.29	\$7.68		
El Paso Electric Company	EE	\$2.42	\$2.52	\$2.63	\$2.74	\$2.85	\$2.97	\$3.09	\$3.23	\$3.37	\$3.53	\$3.71	\$3.90	\$4.10	\$4.32	\$4.55	\$4.80	\$5.05		
Hawaiian Electric Industries, Inc.	HE	\$1.64	\$1.74	\$1.84	\$1.95	\$2.06	\$2.18	\$2.31	\$2.45	\$2.59	\$2.73	\$2.88	\$3.04	\$3.20	\$3.37	\$3.55	\$3.74	\$3.94		
Northwestern Corporation	NWE	\$3.34	\$3.43	\$3.51	\$3.60	\$3.70	\$3.79	\$3.89	\$4.01	\$4.14	\$4.31	\$4.50	\$4.72	\$4.97	\$5.23	\$5.51	\$5.80	\$6.11		
OGE Energy Corp.	OGE	\$1.92	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.13	\$3.30	\$3.47	\$3.66	\$3.85	\$4.06	\$4.27	\$4.50		
PNM Resources, Inc.	PNM	\$1.92	\$2.02	\$2.13	\$2.25	\$2.37	\$2.50	\$2.64	\$2.78	\$2.93	\$3.09	\$3.25	\$3.43	\$3.61	\$3.80	\$4.00	\$4.22	\$4.44		
Pinnacle West Capital Corporation	PNW	\$4.43	\$4.65	\$4.88	\$5.12	\$5.37	\$5.63	\$5.91	\$6.20	\$6.52	\$6.85	\$7.21	\$7.59	\$7.99	\$8.41	\$8.86	\$9.33	\$9.83		
Projected Annual Dividend Payout Ratio				[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]		
Company	Ticker			2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
ALLETE, Inc.	ALE			66.00%	66.00%	66.00%	66.00%	65.94%	65.88%	65.82%	65.75%	65.69%	65.63%	65.57%	65.57%	65.57%	65.57%	65.57%		
Black Hills Corporation	BKH			59.00%	58.33%	57.67%	57.00%	58.22%	59.45%	60.67%	61.90%	63.12%	64.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
El Paso Electric Company	EE			61.00%	62.33%	63.67%	65.00%	65.08%	65.16%	65.24%	65.33%	65.41%	65.49%	65.57%	65.57%	65.57%	65.57%	65.57%		
Hawaiian Electric Industries, Inc.	HE			61.00%	61.33%	61.67%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Northwestern Corporation	NWE			65.00%	66.00%	67.00%	68.00%	67.65%	67.31%	66.96%	66.61%	66.26%	65.92%	65.57%	65.57%	65.57%	65.57%	65.57%		
OGE Energy Corp.	OGE			71.00%	71.00%	71.00%	71.00%	70.22%	69.45%	68.67%	67.90%	67.12%	66.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
PNM Resources, Inc.	PNM			50.00%	50.00%	50.00%	50.00%	52.22%	54.45%	56.67%	58.90%	61.12%	63.35%	65.57%	65.57%	65.57%	65.57%	65.57%		
Pinnacle West Capital Corporation	PNW			62.00%	62.00%	62.00%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%		
Projected Annual Cash Flows				[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	
Company	Ticker			2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal Value	
ALLETE, Inc.	ALE			\$2.27	\$2.37	\$2.49	\$2.61	\$2.73	\$2.86	\$2.99	\$3.14	\$3.30	\$3.47	\$3.65	\$3.84	\$4.05	\$4.26	\$4.49	\$135.75	
Black Hills Corporation	BKH			\$2.21	\$2.30	\$2.39	\$2.48	\$2.67	\$2.87	\$3.08	\$3.31	\$3.55	\$3.82	\$4.09	\$4.31	\$4.54	\$4.78	\$5.04	\$152.27	
El Paso Electric Company	EE			\$1.60	\$1.70	\$1.81	\$1.93	\$2.01	\$2.10	\$2.20	\$2.31	\$2.42	\$2.55	\$2.69	\$2.83	\$2.99	\$3.14	\$3.31	\$100.09	
Hawaiian Electric Industries, Inc.	HE			\$1.12	\$1.19	\$1.27	\$1.35	\$1.45	\$1.54	\$1.64	\$1.75	\$1.86	\$1.98	\$2.10	\$2.21	\$2.33	\$2.45	\$2.58	\$78.04	
Northwestern Corporation	NWE			\$2.28	\$2.38	\$2.48	\$2.58	\$2.63	\$2.70	\$2.78	\$2.87	\$2.98	\$3.11	\$3.26	\$3.43	\$3.61	\$3.80	\$4.01	\$121.11	
OGE Energy Corp.	OGE			\$1.52	\$1.61	\$1.70	\$1.79	\$1.87	\$1.95	\$2.04	\$2.12	\$2.21	\$2.30	\$2.40	\$2.53	\$2.66	\$2.80	\$2.95	\$89.19	
PNM Resources, Inc.	PNM			\$1.07	\$1.13	\$1.19	\$1.25	\$1.38	\$1.51	\$1.66	\$1.82	\$1.99	\$2.17	\$2.37	\$2.49	\$2.62	\$2.76	\$2.91	\$88.00	
Pinnacle West Capital Corporation	PNW			\$3.02	\$3.17	\$3.33	\$3.49	\$3.69	\$3.91	\$4.14	\$4.39	\$4.65	\$4.93	\$5.24	\$5.52	\$5.81	\$6.12	\$6.44	\$194.79	
Projected Annual Data Investor Cash Flows				[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]
Company	Ticker			Initial	2/15/19	12/31/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	6/30/33
ALLETE, Inc.	ALE			(\$76.55)	\$0.00	\$1.98	\$2.32	\$2.49	\$2.61	\$2.73	\$2.86	\$2.99	\$3.14	\$3.30	\$3.47	\$3.65	\$3.84	\$4.05	\$4.26	\$140.24
Black Hills Corporation	BKH			(\$61.83)	\$0.00	\$1.93	\$2.27	\$2.39	\$2.48	\$2.67	\$2.87	\$3.08	\$3.31	\$3.55	\$3.82	\$4.09	\$4.31	\$4.54	\$4.78	\$157.31
El Paso Electric Company	EE			(\$57.24)	\$0.00	\$1.40	\$1.64	\$1.81	\$1.93	\$2.01	\$2.10	\$2.20	\$2.31	\$2.42	\$2.55	\$2.69	\$2.83	\$2.99	\$3.14	\$103.40
Hawaiian Electric Industries, Inc.	HE			(\$35.90)	\$0.00	\$0.98	\$1.16	\$1.27	\$1.35	\$1.45	\$1.54	\$1.64	\$1.75	\$1.86	\$1.98	\$2.10	\$2.21	\$2.33	\$2.45	\$80.63
Northwestern Corporation	NWE			(\$59.97)	\$0.00	\$2.00	\$2.31	\$2.48	\$2.58	\$2.63	\$2.70	\$2.78	\$2.87	\$2.98	\$3.11	\$3.26	\$3.43	\$3.61	\$3.80	\$125.12
OGE Energy Corp.	OGE			(\$37.55)	\$0.00	\$1.33	\$1.56	\$1.70	\$1.79	\$1.87	\$1.95	\$2.04	\$2.12	\$2.21	\$2.30	\$2.40	\$2.53	\$2.66	\$2.80	\$92.14
PNM Resources, Inc.	PNM			(\$40.10)	\$0.00	\$0.93	\$1.10	\$1.19	\$1.25	\$1.38	\$1.51	\$1.66	\$1.82	\$1.99	\$2.17	\$2.37	\$2.49	\$2.62	\$2.76	\$90.91
Pinnacle West Capital Corporation	PNW			(\$83.10)	\$0.00	\$2.64	\$3.10	\$3.33	\$3.49	\$3.69	\$3.91	\$4.14	\$4.39	\$4.65	\$4.93	\$5.24	\$5.52	\$5.81	\$6.12	\$201.24



Multi-Stage Growth Discounted Cash Flow Model - Terminal P/E Ratio Equals 19.82  
 180 Day Average Stock Price  
 High EPS Growth Rate Estimate in First Stage

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]							
Company	Ticker	Stock Price	EPS Growth Rate Estimates			Long-Term Growth	Payout Ratio			Iterative Solution		Terminal P/E Ratio	Terminal PEG Ratio							
			Zacks	First Call	Line		High Growth	2019	2022	2029	Proof			IRR						
ALLETE, Inc.	ALE	\$76.55	NA	6.00%	3.50%	6.00%	5.32%	66.00%	66.00%	65.57%	\$0.00	8.23%	19.82	3.73						
Black Hills Corporation	BKH	\$61.83	4.70%	4.46%	6.50%	6.50%	5.32%	59.00%	57.00%	65.57%	\$0.00	11.10%	19.82	3.73						
El Paso Electric Company	EE	\$57.24	4.40%	5.10%	3.00%	5.10%	5.32%	61.00%	65.00%	65.57%	\$0.00	7.87%	19.82	3.73						
Hawaiian Electric Industries, Inc.	HE	\$35.90	6.40%	7.80%	3.50%	7.80%	5.32%	61.00%	62.00%	65.57%	\$0.00	10.40%	19.82	3.73						
Northwestern Corporation	NWE	\$59.97	2.80%	2.59%	2.50%	2.60%	5.32%	65.00%	68.00%	65.57%	\$0.00	8.80%	19.82	3.73						
OGE Energy Corp.	OGE	\$37.55	5.20%	NA	6.00%	6.00%	5.32%	71.00%	71.00%	65.57%	\$0.00	10.53%	19.82	3.73						
PNM Resources, Inc.	PNM	\$40.10	4.70%	4.10%	7.50%	7.50%	5.32%	50.00%	50.00%	65.57%	\$0.00	10.28%	19.82	3.73						
Pinnacle West Capital Corporation	PNW	\$83.10	4.60%	4.16%	6.00%	6.00%	5.32%	62.00%	62.00%	65.57%	\$0.00	10.64%	19.82	3.73	Including Flotation Costs					
											Mean	9.73%	19.82							9.86%
											Max	11.10%							11.23%	
											Min	7.87%							8.00%	
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]		
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
ALLETE, Inc.	ALE	\$3.13	\$3.32	\$3.52	\$3.73	\$3.95	\$4.19	\$4.44	\$4.70	\$4.97	\$5.25	\$5.55	\$5.85	\$6.16	\$6.49	\$6.83	\$7.19	\$7.58		
Black Hills Corporation	BKH	\$3.38	\$3.60	\$3.83	\$4.08	\$4.35	\$4.63	\$4.93	\$5.24	\$5.56	\$5.89	\$6.23	\$6.57	\$6.92	\$7.29	\$7.68	\$8.08	\$8.51		
El Paso Electric Company	EE	\$2.42	\$2.54	\$2.67	\$2.81	\$2.95	\$3.10	\$3.26	\$3.43	\$3.61	\$3.79	\$3.99	\$4.20	\$4.43	\$4.66	\$4.91	\$5.17	\$5.45		
Hawaiian Electric Industries, Inc.	HE	\$1.64	\$1.77	\$1.91	\$2.05	\$2.21	\$2.39	\$2.57	\$2.76	\$2.96	\$3.15	\$3.34	\$3.54	\$3.72	\$3.92	\$4.13	\$4.35	\$4.58		
Northwestern Corporation	NWE	\$3.34	\$3.43	\$3.52	\$3.61	\$3.70	\$3.80	\$3.90	\$4.02	\$4.16	\$4.32	\$4.51	\$4.73	\$4.98	\$5.25	\$5.53	\$5.82	\$6.13		
OGE Energy Corp.	OGE	\$1.92	\$2.04	\$2.16	\$2.29	\$2.42	\$2.57	\$2.72	\$2.88	\$3.05	\$3.22	\$3.40	\$3.59	\$3.78	\$3.98	\$4.19	\$4.41	\$4.65		
PNM Resources, Inc.	PNM	\$1.92	\$2.06	\$2.22	\$2.39	\$2.56	\$2.76	\$2.96	\$3.17	\$3.39	\$3.61	\$3.82	\$4.04	\$4.26	\$4.48	\$4.72	\$4.97	\$5.24		
Pinnacle West Capital Corporation	PNW	\$4.43	\$4.70	\$4.98	\$5.28	\$5.59	\$5.93	\$6.28	\$6.65	\$7.04	\$7.44	\$7.85	\$8.27	\$8.72	\$9.18	\$9.67	\$10.18	\$10.72		
Projected Annual Dividend Payout Ratio			[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]			
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033				
ALLETE, Inc.	ALE	66.00%	66.00%	66.00%	66.00%	65.94%	65.88%	65.82%	65.75%	65.69%	65.63%	65.57%	65.57%	65.57%	65.57%	65.57%				
Black Hills Corporation	BKH	59.00%	58.33%	57.67%	57.00%	58.22%	59.45%	60.67%	61.90%	63.12%	64.35%	65.57%	65.57%	65.57%	65.57%	65.57%				
El Paso Electric Company	EE	61.00%	62.33%	63.67%	65.00%	65.08%	65.16%	65.24%	65.33%	65.41%	65.49%	65.57%	65.57%	65.57%	65.57%	65.57%				
Hawaiian Electric Industries, Inc.	HE	61.00%	61.33%	61.67%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%				
Northwestern Corporation	NWE	65.00%	66.00%	67.00%	68.00%	67.65%	67.31%	66.96%	66.61%	66.26%	65.92%	65.57%	65.57%	65.57%	65.57%	65.57%				
OGE Energy Corp.	OGE	71.00%	71.00%	71.00%	71.00%	70.22%	69.45%	68.67%	67.90%	67.12%	66.35%	65.57%	65.57%	65.57%	65.57%	65.57%				
PNM Resources, Inc.	PNM	50.00%	50.00%	50.00%	50.00%	52.22%	54.45%	56.67%	58.90%	61.12%	63.35%	65.57%	65.57%	65.57%	65.57%	65.57%				
Pinnacle West Capital Corporation	PNW	62.00%	62.00%	62.00%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%				
Projected Annual Cash Flows			[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]		
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal Value			
ALLETE, Inc.	ALE	\$2.32	\$2.46	\$2.61	\$2.76	\$2.93	\$3.10	\$3.27	\$3.45	\$3.64	\$3.84	\$4.04	\$4.25	\$4.48	\$4.72	\$4.97	\$150.15			
Black Hills Corporation	BKH	\$2.26	\$2.38	\$2.51	\$2.64	\$2.87	\$3.12	\$3.38	\$3.65	\$3.93	\$4.23	\$4.54	\$4.78	\$5.03	\$5.30	\$5.58	\$168.77			
El Paso Electric Company	EE	\$1.63	\$1.75	\$1.88	\$2.02	\$2.12	\$2.23	\$2.35	\$2.48	\$2.61	\$2.75	\$2.90	\$3.06	\$3.22	\$3.39	\$3.57	\$107.97			
Hawaiian Electric Industries, Inc.	HE	\$1.16	\$1.26	\$1.37	\$1.48	\$1.61	\$1.74	\$1.88	\$2.02	\$2.16	\$2.30	\$2.44	\$2.57	\$2.71	\$2.85	\$3.00	\$90.80			
Northwestern Corporation	NWE	\$2.29	\$2.38	\$2.48	\$2.58	\$2.64	\$2.70	\$2.78	\$2.88	\$2.99	\$3.12	\$3.27	\$3.44	\$3.62	\$3.82	\$4.02	\$121.48			
OGE Energy Corp.	OGE	\$1.53	\$1.62	\$1.72	\$1.82	\$1.91	\$2.00	\$2.09	\$2.19	\$2.28	\$2.38	\$2.48	\$2.61	\$2.75	\$2.89	\$3.05	\$92.10			
PNM Resources, Inc.	PNM	\$1.11	\$1.19	\$1.28	\$1.38	\$1.55	\$1.73	\$1.92	\$2.12	\$2.34	\$2.56	\$2.79	\$2.94	\$3.10	\$3.26	\$3.43	\$103.81			
Pinnacle West Capital Corporation	PNW	\$3.09	\$3.27	\$3.47	\$3.68	\$3.93	\$4.19	\$4.47	\$4.76	\$5.07	\$5.38	\$5.71	\$6.02	\$6.34	\$6.68	\$7.03	\$212.51			
Projected Annual Data Investor Cash Flows		[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]		
Company	Ticker	Initial Outflow	2/15/19	12/31/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	6/30/33		
ALLETE, Inc.	ALE	(\$76.55)	\$0.00	\$2.03	\$2.39	\$2.61	\$2.76	\$2.93	\$3.10	\$3.27	\$3.45	\$3.64	\$3.84	\$4.04	\$4.25	\$4.48	\$4.72	\$155.12		
Black Hills Corporation	BKH	(\$61.83)	\$0.00	\$1.98	\$2.34	\$2.51	\$2.64	\$2.87	\$3.12	\$3.38	\$3.65	\$3.93	\$4.23	\$4.54	\$4.78	\$5.03	\$5.30	\$174.35		
El Paso Electric Company	EE	(\$57.24)	\$0.00	\$1.43	\$1.67	\$1.88	\$2.02	\$2.12	\$2.23	\$2.35	\$2.48	\$2.61	\$2.75	\$2.90	\$3.06	\$3.22	\$3.39	\$111.54		
Hawaiian Electric Industries, Inc.	HE	(\$35.90)	\$0.00	\$1.02	\$1.21	\$1.37	\$1.48	\$1.61	\$1.74	\$1.88	\$2.02	\$2.16	\$2.30	\$2.44	\$2.57	\$2.71	\$2.85	\$93.80		
Northwestern Corporation	NWE	(\$59.97)	\$0.00	\$2.00	\$2.32	\$2.48	\$2.58	\$2.64	\$2.70	\$2.78	\$2.88	\$2.99	\$3.12	\$3.27	\$3.44	\$3.62	\$3.82	\$125.50		
OGE Energy Corp.	OGE	(\$37.55)	\$0.00	\$1.34	\$1.58	\$1.72	\$1.82	\$1.91	\$2.00	\$2.09	\$2.19	\$2.28	\$2.38	\$2.48	\$2.61	\$2.75	\$2.89	\$95.15		
PNM Resources, Inc.	PNM	(\$40.10)	\$0.00	\$0.97	\$1.15	\$1.28	\$1.38	\$1.55	\$1.73	\$1.92	\$2.12	\$2.34	\$2.56	\$2.79	\$2.94	\$3.10	\$3.26	\$107.24		
Pinnacle West Capital Corporation	PNW	(\$83.10)	\$0.00	\$2.70	\$3.18	\$3.47	\$3.68	\$3.93	\$4.19	\$4.47	\$4.76	\$5.07	\$5.38	\$5.71	\$6.02	\$6.34	\$6.68	\$219.54		

Multi-Stage Growth Discounted Cash Flow Model - Terminal P/E Ratio Equals 19.82  
 180 Day Average Stock Price  
 Low EPS Growth Rate Estimate in First Stage

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]							
Company	Ticker	Stock Price	EPS Growth Rate Estimates			Long-Term Growth	Payout Ratio			Iterative Solution		Terminal P/E Ratio	Terminal PEG Ratio							
			Zacks	First Call	Line		Low Value	2019	2022	2029	Proof			IRR						
ALLETE, Inc.	ALE	\$76.55	NA	6.00%	3.50%	3.50%	5.32%	66.00%	66.00%	65.57%	\$0.00	6.53%	19.82	3.73						
Black Hills Corporation	BKH	\$61.83	4.70%	4.46%	6.50%	4.46%	5.32%	59.00%	57.00%	65.57%	\$0.00	9.66%	19.82	3.73						
El Paso Electric Company	EE	\$57.24	4.40%	5.10%	3.00%	3.00%	5.32%	61.00%	65.00%	65.57%	\$0.00	6.43%	19.82	3.73						
Hawaiian Electric Industries, Inc.	HE	\$35.90	6.40%	7.80%	3.50%	3.50%	5.32%	61.00%	62.00%	65.57%	\$0.00	7.43%	19.82	3.73						
Northwestern Corporation	NWE	\$59.97	2.80%	2.59%	2.50%	2.50%	5.32%	65.00%	68.00%	65.57%	\$0.00	8.73%	19.82	3.73						
OGE Energy Corp.	OGE	\$37.55	5.20%	NA	6.00%	5.20%	5.32%	71.00%	71.00%	65.57%	\$0.00	9.96%	19.82	3.73						
PNM Resources, Inc.	PNM	\$40.10	4.70%	4.10%	7.50%	4.10%	5.32%	50.00%	50.00%	65.57%	\$0.00	7.95%	19.82	3.73						
Pinnacle West Capital Corporation	PNW	\$83.10	4.60%	4.16%	6.00%	4.16%	5.32%	62.00%	62.00%	65.57%	\$0.00	9.34%	19.82	3.73	Including Flotation Costs					
											Mean	8.25%	19.82		8.38%					
											Max	9.96%			10.09%					
											Min	6.43%			6.56%					
Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]		
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
ALLETE, Inc.	ALE	\$3.13	\$3.24	\$3.35	\$3.47	\$3.59	\$3.72	\$3.85	\$3.99	\$4.16	\$4.34	\$4.55	\$4.77	\$5.03	\$5.29	\$5.58	\$5.87	\$6.19		
Black Hills Corporation	BKH	\$3.38	\$3.53	\$3.69	\$3.85	\$4.02	\$4.20	\$4.39	\$4.59	\$4.81	\$5.05	\$5.30	\$5.58	\$5.87	\$6.18	\$6.51	\$6.86	\$7.22		
El Paso Electric Company	EE	\$2.42	\$2.49	\$2.57	\$2.64	\$2.72	\$2.81	\$2.89	\$2.99	\$3.10	\$3.23	\$3.38	\$3.54	\$3.73	\$3.93	\$4.14	\$4.36	\$4.59		
Hawaiian Electric Industries, Inc.	HE	\$1.64	\$1.70	\$1.76	\$1.82	\$1.88	\$1.95	\$2.02	\$2.09	\$2.18	\$2.27	\$2.38	\$2.50	\$2.63	\$2.77	\$2.92	\$3.08	\$3.24		
Northwestern Corporation	NWE	\$3.34	\$3.42	\$3.51	\$3.60	\$3.69	\$3.78	\$3.87	\$3.99	\$4.13	\$4.29	\$4.47	\$4.69	\$4.94	\$5.20	\$5.48	\$5.77	\$6.08		
OGE Energy Corp.	OGE	\$1.92	\$2.02	\$2.12	\$2.24	\$2.35	\$2.47	\$2.60	\$2.74	\$2.88	\$3.03	\$3.19	\$3.36	\$3.54	\$3.73	\$3.93	\$4.14	\$4.36		
PNM Resources, Inc.	PNM	\$1.92	\$2.00	\$2.08	\$2.17	\$2.25	\$2.35	\$2.44	\$2.55	\$2.66	\$2.79	\$2.93	\$3.08	\$3.24	\$3.41	\$3.59	\$3.78	\$3.98		
Pinnacle West Capital Corporation	PNW	\$4.43	\$4.61	\$4.81	\$5.01	\$5.21	\$5.43	\$5.66	\$5.90	\$6.17	\$6.46	\$6.78	\$7.13	\$7.51	\$7.91	\$8.33	\$8.77	\$9.24		
Projected Annual Dividend Payout Ratio			[31]	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]			
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033				
ALLETE, Inc.	ALE	66.00%	66.00%	66.00%	66.00%	65.94%	65.88%	65.82%	65.75%	65.69%	65.63%	65.57%	65.57%	65.57%	65.57%	65.57%				
Black Hills Corporation	BKH	59.00%	58.33%	57.67%	57.00%	58.22%	59.45%	60.67%	61.90%	63.12%	64.35%	65.57%	65.57%	65.57%	65.57%	65.57%				
El Paso Electric Company	EE	61.00%	62.33%	63.67%	65.00%	65.08%	65.16%	65.24%	65.33%	65.41%	65.49%	65.57%	65.57%	65.57%	65.57%	65.57%				
Hawaiian Electric Industries, Inc.	HE	61.00%	61.33%	61.67%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%				
Northwestern Corporation	NWE	65.00%	66.00%	67.00%	68.00%	67.65%	67.31%	66.96%	66.61%	66.26%	65.92%	65.57%	65.57%	65.57%	65.57%	65.57%				
OGE Energy Corp.	OGE	71.00%	71.00%	71.00%	71.00%	70.22%	69.45%	68.67%	67.90%	67.12%	66.35%	65.57%	65.57%	65.57%	65.57%	65.57%				
PNM Resources, Inc.	PNM	50.00%	50.00%	50.00%	50.00%	52.22%	54.45%	56.67%	58.90%	61.12%	63.35%	65.57%	65.57%	65.57%	65.57%	65.57%				
Pinnacle West Capital Corporation	PNW	62.00%	62.00%	62.00%	62.00%	62.51%	63.02%	63.53%	64.04%	64.55%	65.06%	65.57%	65.57%	65.57%	65.57%	65.57%				
Projected Annual Cash Flows			[46]	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]		
Company	Ticker	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal Value			
ALLETE, Inc.	ALE	\$2.21	\$2.29	\$2.37	\$2.45	\$2.54	\$2.63	\$2.74	\$2.85	\$2.99	\$3.13	\$3.30	\$3.47	\$3.66	\$3.85	\$4.06	\$122.59			
Black Hills Corporation	BKH	\$2.18	\$2.25	\$2.32	\$2.40	\$2.56	\$2.73	\$2.92	\$3.12	\$3.35	\$3.59	\$3.85	\$4.05	\$4.27	\$4.50	\$4.74	\$143.18			
El Paso Electric Company	EE	\$1.57	\$1.65	\$1.73	\$1.82	\$1.88	\$1.95	\$2.02	\$2.11	\$2.21	\$2.32	\$2.45	\$2.58	\$2.71	\$2.86	\$3.01	\$90.97			
Hawaiian Electric Industries, Inc.	HE	\$1.07	\$1.12	\$1.16	\$1.21	\$1.26	\$1.32	\$1.38	\$1.46	\$1.54	\$1.63	\$1.73	\$1.82	\$1.92	\$2.02	\$2.13	\$64.23			
Northwestern Corporation	NWE	\$2.28	\$2.37	\$2.47	\$2.57	\$2.62	\$2.68	\$2.76	\$2.86	\$2.97	\$3.09	\$3.24	\$3.41	\$3.59	\$3.78	\$3.99	\$120.48			
OGE Energy Corp.	OGE	\$1.51	\$1.59	\$1.67	\$1.76	\$1.83	\$1.90	\$1.98	\$2.06	\$2.14	\$2.23	\$2.32	\$2.45	\$2.58	\$2.71	\$2.86	\$86.36			
PNM Resources, Inc.	PNM	\$1.04	\$1.08	\$1.13	\$1.17	\$1.28	\$1.39	\$1.51	\$1.64	\$1.79	\$1.95	\$2.12	\$2.24	\$2.36	\$2.48	\$2.61	\$78.98			
Pinnacle West Capital Corporation	PNW	\$2.98	\$3.10	\$3.23	\$3.37	\$3.54	\$3.72	\$3.92	\$4.14	\$4.38	\$4.64	\$4.92	\$5.19	\$5.46	\$5.75	\$6.06	\$183.13			
Projected Annual Data Investor Cash Flows		[62]	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]		
Company	Ticker	Initial Outflow	2/15/19	12/31/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	6/30/33		
ALLETE, Inc.	ALE	(\$76.55)	\$0.00	\$1.93	\$2.25	\$2.37	\$2.45	\$2.54	\$2.63	\$2.74	\$2.85	\$2.99	\$3.13	\$3.30	\$3.47	\$3.66	\$3.85	\$126.65		
Black Hills Corporation	BKH	(\$61.83)	\$0.00	\$1.90	\$2.22	\$2.32	\$2.40	\$2.56	\$2.73	\$2.92	\$3.12	\$3.35	\$3.59	\$3.85	\$4.05	\$4.27	\$4.50	\$147.91		
El Paso Electric Company	EE	(\$57.24)	\$0.00	\$1.37	\$1.59	\$1.73	\$1.82	\$1.88	\$1.95	\$2.02	\$2.11	\$2.21	\$2.32	\$2.45	\$2.58	\$2.71	\$2.86	\$93.98		
Hawaiian Electric Industries, Inc.	HE	(\$35.90)	\$0.00	\$0.94	\$1.09	\$1.16	\$1.21	\$1.26	\$1.32	\$1.38	\$1.46	\$1.54	\$1.63	\$1.73	\$1.82	\$1.92	\$2.02	\$66.36		
Northwestern Corporation	NWE	(\$59.97)	\$0.00	\$1.99	\$2.31	\$2.47	\$2.57	\$2.62	\$2.68	\$2.76	\$2.86	\$2.97	\$3.09	\$3.24	\$3.41	\$3.59	\$3.78	\$124.47		
OGE Energy Corp.	OGE	(\$37.55)	\$0.00	\$1.32	\$1.55	\$1.67	\$1.76	\$1.83	\$1.90	\$1.98	\$2.06	\$2.14	\$2.23	\$2.32	\$2.45	\$2.58	\$2.71	\$89.22		
PNM Resources, Inc.	PNM	(\$40.10)	\$0.00	\$0.91	\$1.06	\$1.13	\$1.17	\$1.28	\$1.39	\$1.51	\$1.64	\$1.79	\$1.95	\$2.12	\$2.24	\$2.36	\$2.48	\$81.60		
Pinnacle West Capital Corporation	PNW	(\$83.10)	\$0.00	\$2.60	\$3.04	\$3.23	\$3.37	\$3.54	\$3.72	\$3.92	\$4.14	\$4.38	\$4.64	\$4.92	\$5.19	\$5.46	\$5.75	\$189.19		

Multi-Stage DCF Notes:

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- [1] Source: Bloomberg; based on 30-, 90-, and 180-day historical average as of February 15, 2019
  - [2] Source: Zacks
  - [3] Source: Yahoo! Finance
  - [4] Source: Value Line
  - [5] Equals indicated value (average, minimum, maximum) of Columns [2], [3], [4]
  - [6] Source: Federal Reserve, Bureau of Economic Analysis, Blue Chip Financial Forecast
  - [7] Source: Value Line
  - [8] Source: Value Line
  - [9] Source: Bloomberg Professional
  - [10] Equals Column [1] + Column [62]
  - [11] Equals result of Excel Solver function; goal: Column [10] equals \$0.00
  - [12] Equals Column [61] / Column [30] or Proxy Group 30-day average PE ratio. Source: S&P Global Market Intelligence
  - [13] Equals Column [12] / (Column [6] x 100)
  - [14] Source: Value Line
  - [15] Equals Column [14] x (1 + Column [5])
  - [16] Equals Column [15] x (1 + Column [5])
  - [17] Equals Column [16] x (1 + Column [5])
  - [18] Equals Column [17] x (1 + Column [5])
  - [19] Equals Column [18] x (1 + Column [5])
  - [20] Equals Column [19] x (1 + Column [5])
  - [21] Equals (1 + (Column [5] + (((Column [6] - Column [5]) / (2029 - 2024 + 1)) x (2024 - 2023)))) x Column [20]
  - [22] Equals (1 + (Column [5] + (((Column [6] - Column [5]) / (2029 - 2024 + 1)) x (2025 - 2023)))) x Column [21]
  - [23] Equals (1 + (Column [5] + (((Column [6] - Column [5]) / (2029 - 2024 + 1)) x (2026 - 2023)))) x Column [22]
  - [24] Equals (1 + (Column [5] + (((Column [6] - Column [5]) / (2029 - 2024 + 1)) x (2027 - 2023)))) x Column [23]
  - [25] Equals (1 + (Column [5] + (((Column [6] - Column [5]) / (2029 - 2024 + 1)) x (2028 - 2023)))) x Column [24]
  - [26] Equals Column [25] x (1 + Column [6])
  - [27] Equals Column [26] x (1 + Column [6])
  - [28] Equals Column [27] x (1 + Column [6])
  - [29] Equals Column [28] x (1 + Column [6])
  - [30] Equals Column [29] x (1 + Column [6])
  - [31] Equals Column [7]
  - [32] Equals Column [31] + ((Column [34] - Column [31]) / 3)
  - [33] Equals Column [32] + ((Column [34] - Column [31]) / 3)
  - [34] Equals Column [8]
  - [35] Equals Column [34] + ((Column [41] - Column [34]) / 7)
  - [36] Equals Column [35] + ((Column [41] - Column [34]) / 7)
  - [37] Equals Column [36] + ((Column [41] - Column [34]) / 7)
  - [38] Equals Column [37] + ((Column [41] - Column [34]) / 7)
  - [39] Equals Column [38] + ((Column [41] - Column [34]) / 7)
  - [40] Equals Column [39] + ((Column [41] - Column [34]) / 7)
  - [41] Equals Column [9]
  - [42] Equals Column [9]
  - [43] Equals Column [9]
  - [44] Equals Column [9]
  - [45] Equals Column [9]
  - [46] Equals Column [16] x Column [31]
  - [47] Equals Column [17] x Column [32]
  - [48] Equals Column [18] x Column [33]
  - [49] Equals Column [19] x Column [34]
  - [50] Equals Column [20] x Column [35]
  - [51] Equals Column [21] x Column [36]
  - [52] Equals Column [22] x Column [37]
  - [53] Equals Column [23] x Column [38]
  - [54] Equals Column [24] x Column [39]
  - [55] Equals Column [25] x Column [40]
  - [56] Equals Column [26] x Column [41]
  - [57] Equals Column [27] x Column [42]
  - [58] Equals Column [28] x Column [43]
  - [59] Equals Column [29] x Column [44]
  - [60] Equals Column [30] x Column [45]
  - [61] Equals (Column [60] x (1 + Column [6])) / (Column [11] - Column [6]), or Column [12] x Column [30]
  - [62] Equals negative net present value; discount rate equals Column [11], cash flows equal Column [63] through Column [78]
  - [63] Equals \$0.00
  - [64] Equals Column [46] x (12/31/2019 - 2/15/2019) / 365
  - [65] Equals Column [46] x (1 + (0.5 x Column [5]))
  - [66] Equals Column [48]
  - [67] Equals Column [49]
  - [68] Equals Column [50]
  - [69] Equals Column [51]
  - [70] Equals Column [52]
  - [71] Equals Column [53]
  - [72] Equals Column [54]
  - [73] Equals Column [55]
  - [74] Equals Column [56]
  - [75] Equals Column [57]

[76] Equals Column [58]  
[77] Equals Column [59]  
[78] Equals Column [60] + [61]